Oral, Tuesday, April 18 AM

ALPS <Room 302>

[Opening Address] 9:00-9:15
Hitoki Yoneda
Conference Chair
Inst. for Laser Sci., Univ. Electro-Comm., Japan

[ALPS1] 9:15-10:45
Optical frequency comb technology and applications
Chair: Mitsuru Musha
Inst. for laser Sci. Univ. of Electro-Communications, Japan

ALPS1-1 9:15 *Invited*

Frequency comb sources for spectroscopy in the mid-infrared
Ingmar Hartl
DESY, Germany

ALPS1-2 9:45

One-shot multi-point imaging with a fiber bundle using spectral interferometry of chirped optical- frequency comb
M. Uchida[1,2], T. Kato[1,2], Y. Tanaka[1], and K. Minoshima[1,2]
[1]The Univ. of Electro-Communications (UEC), [2]Japan Sci. and Tech. Agency (JST), ERATO MINOSHIMA Intelligent Optical Synthesizer (IOS) Project

ALPS1-3 10:00

Coherent Mid-infrared Optical Frequency Comb Generation Based on an Yb-doped Fiber Laser System
L. Jin[1], M. Yamanaka[1], V. Sonnenschein[1], H. Tomita[1], T. Iguchi[1], A. Sato[2], A. Ideno[2], T. Oh-hara[2], and N. Nishizawa[1]
[1]Dpet. Quantum Engineering, Nagoya Univ., Japan[2], Sekisui Medical Co. Ltd., Japan

ALPS1-4 10:15

Repetition rate multiplication of a fiber-based optical frequency comb with a long-fiber-based ring resonator
Y. Nakajima[1,2], A. Nishiyama[1,2,3], S. Yoshida[1,2], T. Hariki[1], and K. Minoshima[1,2]
[1]The Univ. of Electro-Communications, Japan, [2]JST, ERATO MINOSHIMA IOS Project, Japan, [3]Res. Fellow of the JSPS, Japan

ALPS1-5 10:30

Development and characterization of 1.0 - 2.1 um octave-spanning, SC comb based on Er-doped ultrashort pulse fiber laser
T. Niinomi[1], Y. Nomura[1], L. Jin[1], Y. Ozeki[2], and N. Nishizawa[1]
[1]Nagoya Univ., Japan, [2]University of Tokyo, Japan

---- 10:45-11:00 Break -----

ALPS <Room 511+512>

CLES / LANSA <Room 416+417>

[PLE] 9:30-XX:XX
XXXXX
Chair: XXXXX
XXXXX

PLE-1 9:30 *Invited*

Laser-driven neutron beams for applications
Markus Roth
Technische Universität Darmstadt, Germany

PLE-2 10:30 *Invited*

Recent trend of neutron applications using accelerator driven neutron sources
Yoshiaki Kiyanagi
Nagoya University, Japan

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HEDS <Room 311+312>

[Opening] 9:00-9:10
Opening Remarks 9:00
R. Kodama
Conference Chair of HEDS 2017
Osaka University, Japan

[HEDS1] 9:10-10:30
Plenary (ImPACT Session I)
Chair: T. Hosokai
Osaka University, Japan

HEDS1-1 9:10 *Plenary I*

Outlook on the new physics with next generation short pulse high power lasers
Serugei Bulanov
QST, Japan

HEDS1-2 9:50 *Plenary II*

Plasma Acceleration: status and Path Forward
Chan Joshi
UCLA ,USA

----- 10:30-11:00 Group Photo & Break -----

LSSE <Room 316>

[Opening] 9:45-10:00
Opening Remarks
Toshikazu Ebisuzaki
Conference Chair of LSSE 2017
Chief Scientist, Computational Astrophysics Laboratory, RIKEN, Japan

[LSSE1] 10:00-12:00
Lasers for Space Development and Earth Sciences
Chair: Toshikazu Ebisuzaki
Computational Astrophysics Laboratory, RIKEN, Japan

LSSE1-1 10:00 *Invited*

Lasers on Mars: searching for habitability and traces of life
Sylvestre Maurice[1], R. C. Wiens[2], F. Rull[3]
[1]IRAP (Univ. Paul Sabatier, CNRS), France, [2]Los Alamos National Laboratory, USA, [3]Unidad UVa-CSIC al Centro de Astobiologia, University of Valladolid, Spain

Oral, Tuesday, April 18 AM

ALPS <Room 302>

[ALPS2] 11:00-12:00
Dual-comb spectroscopy
Chair: Hajime Inaba
AIST, Japan

ALPS2-1 11:00 *Invited*

Self-Corrected Dual-Comb Spectroscopy

Jérôme Genest[1], Nicolas Bourbeau Hébert[1], Jean-Daniel Deschênes[1], David G. Lancaster[2]
[1]Centre d'optique, photonique et laser, Univ. Laval, Canada, [2]Laser Phys. and Photonics Devices Lab., Univ. of South Australia, Australia

ALPS2-2 11:30

Development of Rapid Evaluation Method of Anisotropy of Nonlinear Optical Materials by Dual Comb Spectroscopy

K. Kondo[1,2], A. Asahara[1,2], Y. Wang[1], I. Shoji[3], K. Minoshima[1,2]
[1]The Univ. of Electro-Communications, Japan, [2]JST,ERATO MINOSHIMA Intelligent Optical Synthesizer, Japan, [3]Chuo Univ., Japan

ALPS2-3 11:45

Application of Relative Carrier Envelope Offset Frequency for Coherent Control in Dual-Comb Configuration

A. Asahara[1,2], K. Kondo[1,2], Y. Wang[1], and K. Minoshima[1,2]
[1]Univ. of Electro-Communications, Japan, [2]JST, ERATO MINOSHIMA Intelligent Optical Synthesizer, Japan

----- 12:00-13:15 Lunch Break -----

ALPS <Room 511+512>

[ALPS3] 11:00-12:00
High energy laser systems and technology
Chair: Hiromitsu. Kiriyama
QST, Japan

ALPS3-1 11:00 *Invited*

PENELOPE – amplifier benchmarks and 10 J performance

D. Albach[1], M. Siebold[1], M. Loeser[1,2], C. Bernert[1,2] and U. Schramm[1,2]
[1]Helmholtz-Zentrum Dresden-Rossendorf, Germany [2]Technische Universität Dresden, Germany

ALPS3-2 11:30

Demonstration of a 64J at 10ns Output from Cryo- cooled Yb:YAG Laser using new laser-diode technology

T. Sekine, Y. Takeuchi, Y. Hatano, Y. Muramatsu, T. Kurita, T. Morita, Y. Mizuta, Y. Kabeya, K. Kawai, T. Iguchi, Y. Tamaoki, M. Kurata, K. Iyama, Y. Zheng, Y. Kato
Industrial Development Center, Central Res. Lab., Hamamatsu Photonics K.K., Japan

ALPS3-3 11:45

Development of Materials Processing Technology using 100-J class High-Energy-Laser Pulses

T. Watati, T. Kurita, T. Sekine, Y. Takeuchi, Y. Mizuta, Y. Kabeya, and Y. Kato
Cent. Res. Lab. Industries R&D Center, Hamamatsu Photonics K.K, Japan

----- 12:00-13:15 Lunch Break -----

CLES / LANSA <Room 416+417>

[CN1] 12:40-XX:XX
XXXXX
Chair: XXXXX
XXXXX

CN1-1 12:40 *Invited*

Current status of cyclotron-based epithermal neutron source for boron neutron capture therapy

Hiroki Tanaka[1], Yoshinori Sakurai[1], Minoru Suzuki[1], Shin-ichiro Masunaga[1], Toshinori Mitsumoto[2], Akira Maruhashi[1], Koji Ono[1]
[1]Kyoto University Research Reactor Institute, Japan, [2]Sumitomo Heavy Industries Ltd, Japan

Oral, Tuesday, April 18 AM

HEDS <Room 311+312>

[HEDS2] 11:00-12:30
Beams (Ion) (ImPACT Session II)
Chair: C. Joshi
UCLA, USA

HEDS2-1 11:00 *Invited*

Ion Acceleration Experiments with High Contrast High peak power PW Laser System J-KAREN-P
Mamiko Nishiuchi
QST, Japan

HEDS2-2 11:30 *Invited*

Laser ion acceleration using the Draco Petawatt facility at HZDR - experiments and radio-biological application
Karl Zeil
HZDR, Germany

HEDS2-3 12:00 *Invited*

High Intensity Laser Matter Interactions with the BELLA PW Laser Facility
Qing Ji
LBNL, USA

----- 12:30-14:00 Lunch -----

LSSE <Room 316>

LSSE1-2 11:00 *Invited*

Hadean environment inferred from the oldest zircon of the Earth: Application of micro-analysis by laser technologies
Shinji Yamamoto[1], Shuhei Sakata[2], Hideyuki Obayashi[3], Takafumi Hirata[3], Tsuyoshi Komiya[3]
[1]Yokohama National University, Japan, [2]Gakushuin University, Japan, [3]The University of Tokyo, Japan

LSSE1-3 11:30 *Invited*

The Origin and Evolution of Planet Mars
James M. Dohm
The Univeristy Museum, The University of Tokyo, Japan

Oral, Tuesday, April 18 PM

ALPS <Room 302>

[ALPS4] 13:15-15:15
Fiber Lasers and Ultrafast Lasers
Chair: TBA

ALPS4-1 13:15 *Invited*

3 kW Single Mode Fiber Laser for Materials Processing

Kensuke Shima, M. Kashiwagi, S. Ikoma, K. Uchiyama, H. Miyauchi, and D. Tanaka
Advanced Technology Laboratory, Fujikura Ltd., Japan

ALPS4-2 13:45

SRS-suppressed photonic bandgap fiber amplifier using a laser diode as the seed source

D. Yagisawa, A. Shirakawa
Inst. for Laser Sci., Univ. of Electro-Communications, Japan

ALPS4-3 14:00

Combining Efficiency in Divided Pulse Amplification

E. Jo, K. Iwata, H. Tünnermann, and A. Shirakawa
Inst. for Laser Sci., Univ. of Electro-Communications, Japan

ALPS4-4 14:15

Single-Shot Spectral Measurements in Soliton Explosion on Yb Fiber Laser with Time-Stretched Dispersive Fourier Transformation

M. Suzuki[1], S. Yoneya[2], and H. Kuroda[1]
[1]Aichi Med. Univ., Japan, [2]Saitama Med. Univ., Japan

ALPS4-5 14:30

2 GHz Repetition Rate, Single-Wall Carbon Nanotube Mode-Locked Yb:YAG Channel Waveguide Laser in an Extended Cavity Configuration

S. Y. Choi[1], T. Calmano[1,2], C. Kränkel[1,2], F. Rotermund[3]
[1]ILP, Univ. Hamburg, Germany, [2]CUI, Univ. Hamburg, Germany, [3]Department of Physics, KAIST, Republic of Korea

ALPS4-6 14:45

Sub-100 fs mode-locked Yb^{3+}-doped CaF_2 laser by single-walled carbon nanotube

N. Yokoshima[1], S. Kitajima[1], A. Shirakawa[1], S. Y. Choi[2], and F. Rotermund[3]
[1]Inst. for Laser sci., Japan, [2]Inst. of Laser-Phys., Univ. of Hamburg, Germany, [3]Department of Physics, Korea Advanced Inst. of Sci. and Tech., Korea

ALPS4-7 15:00

Sub 200 fs Kerr-lens Mode-locked Tm^{3+}:Sc_2O_3 Laser In-band Pumped by a 1611nm Er:Yb Fiber MOPA

M. Tokurakawa[1],Y. Mashiko[1],E. Fujita[1], and C. Kränkel[2,3]
[1]ILS, UEC, Japan [2]Inst. of Laser-Phys., Univ. of Hamburg, Germany, [3]The Hamburg Centre for Ultrafast Imaging, Germany

----- 15:15-15:30 Break -----

ALPS <Room 511+512>

[ALPS5] 13:15-15:00
Ultra-high intensity lasers and technology
Chair: Takunori Taira
IMS, Japan

ALPS5-1 13:15 *Invited*

J-KAREN-P laser facility producing 10^{22} W/cm^2 at 0.1 Hz

H. Kiriyama, M. Nishiuchi, A. S. Pirozhkov, Y. Fukuda, H. Sakaki, A Sagisaka, N. P. Dover, K. Kondo, K. Nishitani, K. Ogura, M. Mori, Y. Miyasaka, M. Kando and K. Kondo
KPSI QST, Japan

ALPS5-2 13:45

J-KAREN-P Laser Wavefront, Spot, and Pulse Shape

A. S. Pirozhkov[1], Y. Fukuda[1], M. Nishiuchi[1], A. Sagisaka[1], K. Ogura[1], H. Kiriyama[1], M. Mori[1], M. Kanasaki[2], K. Kondo[1], and M. Kando[1]
[1]KPSI QST, Japan, [2]Kobe Univ., Japan

ALPS5-3 14:00

Formation process of ozone assisted gas grating

Y. Michine, H. Yoneda
Inst. for Laser Sci., Univ. of Electro-Communications, Japan

ALPS5-4 14:15

Picosecond pedestals of recompressed Ti:Sapphire laser pulses.

M. Kalashnikov, N. Khodakovskiy
Max-Born-Inst. for Nonlinear Opt. and Short Pulse Spectroscopy, Germany

ALPS5-5 14:30

Thin Disk Ti:Sapphire Amplifiers for High Average Power Sub PW class Laser Systems

M. Kalashnikov[1,2], V. Chvykov[2], R. Nagymihaly[2], H. Cao[2], K. Osvay[2]
[1]Max-Born-Inst. for Nonlinear Opt. and Short Pulse Spectroscopy, Germany, [2]ELI-Hu Nkft., Hungary

ALPS5-6 14:45

Compression of high-power femtosecond laser pulses in a solid medium

J. Y. Yoo[1], J. I. Kim[1,2], H. W. Lee[1], J. H. Sung[1,3], J. M. Yang[1], Y. J. Son[1], Y. H. Jang[1], S. K. Lee[1,3], and C. H. Nam[1,2]
[1]Center for Relativistic Laser Sci., Inst. for Basic Sci., Korea, [2]Dep. of Phys. and Photon Sci., GIST, Korea, [3]Ultraintense Laser Lab., Adv. Photonics Res. Inst., GIST, Korea

----- 15:00-15:30 Break -----

CLES / LANSA <Room 416+417>

CN1-2 13:20 *Invited*

Development of the linac-based neutron source for boron neutron capture therapy in University of Tsukuba

Hiroaki Kumada[1], Fujio Naito[2], Hitoshi Kobayashi[2], Toshikazu Kurihara[2], Takashi Obina[2], Yosuke Honda[2], Tsukasa Miyajima[2], Takemi Nakamura[3], Takeji Sakae[4], Kenta Takada[4], Hideyuki Sakurai[4], Akira Matsumura[4]
[1]University of Tsukuba, Japan, [2]High Energy Accelerator Research Organization, Japan, [3]Japan Atomic Energy Agency, Japan, [4]Proton Medical Research Center, University of Tsukuba, Japan

CN1-3 14:00 *Invited*

RIKEN compact neutron systems with fast and slow neutron

Yoshie Otake
RIKEN, RIKEN Center for Advanced Photonics, Japan

CN1-4 15:00 *Invited*

Current status of the accelerator neutron source in Budker Institute

Sergey Taskaev, Boris Bayanov, Alexander Ivanov, Alexey Kashkarev, Dmitri Kasatov, Alexander Makarov, Yuri Ostreinov, Ivan Shchudlo, Igor Sorokin
Budker Institute of Nuclear Physics, Russia

CN1-5 15:40

Nagoya University BNCT system using DC accelerator and sealed lithium targe

Sachiko Yoshihashi[1], Akira Uritani[1], Kenichi Watanabe[1], Atsushi Yamazaki[1], Daiki Furuzawa[1], Kazuya Sato[1], Kazuki Tsuchida[1], Yoshiaki Kiyanagi[1], Hirohiko Shimizu[1], Katsuya Hirota[1], Masaaki Kitaguchi[1], Go Ichikawa[1], Sohei Imajo[1], Yoshiyuki Tsuji[1], Tatsuya Tsuneyoshi[1], Yukinori Hamaji[2]
[1]Nagoya University, Japan, [2]National-Institute for Fusion Science, Japan

Oral Program

Oral, Tuesday, April 18 PM

HEDS <Room 311+312>

[HEDS3] 14:00-15:30
ImPACT (ImPACT Session III)
Chair: A.Faenov
Osaka University, Japan

HEDS3-1 14:00 *Invited*

Status and Perspective of ImPACT Program to Develop Ultra-compact XFEL Technologies
Yuji Sano
JST, Japan

HEDS3-2 14:30 *Invited*

Staging LWFA aiming for repeatable GeV-class accelerator
Tomonao Hosokai
Osaka Univ., Japan

HEDS3-3 15:00 *Invited*

Development of plasma and beam monitors for laser electron accelerators
Masaki Kando
QST, Japan

----- 15:30-16:00 Break -----

LSSE <Room 316>

[LSSE2] 13:30-15:30
Laser-Induced Breakdown Spectroscopy
Chair: Takashi Fujii
Central Research Institute of Electric Power Industry, Japan

LSSE2-1 13:30 *Invited*

Application of laser induced breakdown spectroscopy for the chemical investigation of concrete infrastructure
Gerd Wilsch, Cassian Gottlieb, Tobias Günther, Steven Millar, N. Sankat, Herbert Wiggenhauser
BAM, Germany

LSSE2-2 14:00 *Invited*

LIBS techniques for detecting materials in severe environments
Hironori Ohba[1], Ikuo Wakaida[2]
[1]National Institutes for Quantum and Radiological Science and Technology, Japan, [2]Japan Atomic Energy Agency, Japan

LSSE2-3 14:30

Laser-induced breakdown spectroscopy for diagnosis of porcelain insulators
Takashi Fujii[1], Kouhei Motoki[2], Kohei Yaji[1], Shuzo Eto[1], Eiki Hotta[2], Tetsuya Suekane[2]
[1]Central Research Institute of Electric Power Industry, Japan, [2]Tokyo Institute of Technology, Japan

LSSE2-4 14:50

Remote measurement of energetic material using ultra-short pulse laser
Naohiro Kitayama, Kiyohiro Sugiyama
Acquisition, Technology and Logistics Agency, Japan

Oral, Tuesday, April 18 PM

ALPS <Room 302>

[ALPS6] 15:30-17:30
Advanced Laser Technologies
Chair: Shunichi Matsushita
Furukawa Electric Co., Ltd, Japan

ALPS6-1 15:30 *Invited*

Visible laser oscillation in Pr-doped waterproof fluoro-aluminate glass fiber (tentative)
Yasushi Fujimoto
Osaka Univ., Japan

ALPS6-2 16:00

Pr^{3+}:YLF laser directly pumped by high power blue diode laser
H. Tanaka, K. Iijima, Y. Kiyota, F. Kannari
Keio Univ., Japan

ALPS6-3 16:15

Passively Q-switched, visible Pr:YLF laser operation with a Co:MALO saturable absorber
D.-T. Marzahl[1], M. P. Demesh[2], A. S. Yasukevich[2], V. E. Kisel[2], N. V. Kuleshov[2], and C. Kränkel[1,3]
[1]Inst. für Laser-Phys., Univ. Hamburg, Germany, [2]Center for Opt. Materials and Tech., Belarusian National Tech. Univ., Belarus, [3]The Hamburg Center for Ultrafast Imaging, Univ. Hamburg, Germany

ALPS6-4 16:30

A 796-nm Laser-Diode Pumped Self-Frequency- Doubling Nd:GdCOB Green Laser
L. Li[1,2,3], Y. Liu[1,2,3], S. Zhao[1,2,3], and W. Zheng[1,2,3]
[1]State key Lab. on Integrated Optoelectronics, Inst. of Sem., CAS, China, [2]Lab. of Solid-state Optoelectronics Info. Tech., Inst. of Sem., CAS, China, [3]College of Materials Sci. and Opto-Electronic Tech., Univ. of Chinese Academy of Sci.,China

ALPS6-5 16:45

Comparative study of Ti:sapphire laser pumped by 451-, 478- and 520-nm laser diodes
N. Sugiyama, H. Tanaka, and F. Kannari
Keio Univ., Japan

ALPS6-6 17:00

Yb-doped CaF_2-LaF_3 ceramic laser
K. Yamakado[1], S. Kitajima[1], A. Shirakawa[1], K. Ueda[1] and H. Ishizawa[2]
[1]ILS., UEC., Japan, [2]NIKON Corp., Japan

ALPS6-7 17:15

Brightness enhancement in a ring-shape-pumped solid state laser
S. H. Noh, S. M. An, J. G. Hwang, D. J. Kim and J. W. Kim
Dpt. of Appl. Phy., Hanyang Univ., Ansan, Korea

ALPS <Room 511+512>

[ALPS7] 15:30-17:30
Novel laser control , diagnostics and applications
Chair: Toshiyuki Kawashima
Hamamatsu Photonics K.K., Japan

ALPS7-1 15:30

Attosecond streaking of chirp-free high harmonics in the extreme ultraviolet driven by a long-wavelength infrared light source
N. Saito[1], N. Ishii[1], T. Kanai[1], S. Watanabe[2], and J. Itatani[1]
[1]ISSP, Univ. Tokyo, Japan, [2]Tokyo Univ. Sci., Japan

ALPS7-2 15:45

Ultrafast Thulium-Doped Fiber Amplifier Generating Watt-Level 50 Femtosecond Pulses
Y. Nomura[1,2], T. Fuji[1]
[1]Inst. for Molecular Sci., Japan, [2]JST-PRESTO, Japan

ALPS7-3 16:00

Femtosecond Double-Pulse Laser Ablation for Titanium at the Fluence near Ablation Threshold
Y. Furukawa[1,2], S. Inoue[1,2], M. Hashida[1,2], K. Teramoto[1,2], K. Mori[1,2], Y. Nakamiya[1], S. Sakabe[1,2]
[1]Adv. Res. Cent. for Beam Sci., Inst. for Chem. Res., Kyoto Univ., Japan, [2]Grad. Sch. of Sci., Kyoto Univ., Japan

ALPS7-4 16:15

Mid Infrared Pulse Generation, Shaping and Amplification from a Supercontinuum Pulse
R. Hida, T. Suzuki, Y. Yamaguchi, and F. Kannari
Dep. of Electronics and Electrical Eng., Keio Univ., Japan

ALPS7-5 16:30

Optical pulse compression of supercontinuum using spatial light modulator available for UV-NIR
T. Suzuki[1], M. Yamashita[2,3], and H. Yoneda[1]
[1]Inst. for Laser Sci., Univ. Electro-Comm., Japan, [2]Hokkaido Univ., Japan, 3Kyoto Photonics Soc., Japan

ALPS7-6 16:45

CO_2-TEA Pulse Clipping Using Pulsed High Voltage Pre-Ionization For High Spatial Resolution I.R.LIDAR Systems
T. G. Cherifi
Division of Sci. & Eng., Saint Louis Univ.-Madrid Campus, Spain

ALPS7-7 17:00

Simulation and Experiment of 80 GHz Colliding- Pulse Semiconductor Mode-locked Laser with High Power
P. Zhao[1,2,3], A. Liu[2], and W. Zheng[1,2,3]
[1]State Key Lab. on Int. Opt. Lab, Inst. Semiconductors, CAS, China, [2]Lab. of Solid State Opt. Info. Tech., Inst. Semiconductors, CAS, China, [3]Univ. of Chinese Academy of Sci., China.

CLES / LANSA <Room 416+417>

[LN1] 16:00-XX:XX
XXXXX
Chair: XXXXX
XXXXX

LN1-1 16:00 *Invited*

Laser-driven neutron source development for industrial applications of plasma accelerators
Ceri Brenner[1], S. Kar[2], J. Jowsey[3], C.P. Jones[4], S.R. Mirfayzi[2], D.R. Rusby[5,6], C. Armstrong[5,6], A. Alejo[2], L.A. Wilson[5], R. Clarke[5], H. Ahmed[2], N.M.H. Butler[6], D. Haddock[5], A. Higginson[6], A. McClymont[5], C. Murphy[7], M. Notley[5], P. Oliver[5], R. Allott[5], C. Hernandez-Gomez[5], P. McKenna[6], D. Neely[5], T.B. Scott[4]
[1]Central Laser Facility, Science and Technology Facilities Council, UK, [2]Centre for Plasma Physics, Queen's University Belfast, UK, [3]Ground Floor North B582, Sellafield Ltd, UK, [4]Interface Analysis Centre, HH Wills Physics Laboratory, UK, [5]Central Laser Facility, Science and Technology Facilities Council, Rutherford Appleton Laboratory, UK, [6]Department of Physics, SUPA, University of Strathclyde, UK, [7]Department of Physics, University of York, UK

LN1-2 16:40

Repetitive neutron generation by laser-driven photonuclear reaction
Yasunobu Arikawa[1], Yusuke Kato[1], Yuki Abe[1], Shuto Matsubara[1], Hidetaka Kishimoto[1], Alessio Morace[1], Akifumi Yogo[1], Hiroaki Nishimura[1], Mitsuo Nakai[1], Shinsuke Fujioka[1], Hiroshi Azechi[1], Kunioki Mima[2], Shunsuke Inoue[3], Yoshihide Nakamiya[3], Kensuke Teramoto[3], Masaki Hashida[3], Shuji Sakabe[3]
[1]Institute of Laser Engineering, Osaka University, Japan, [2]The Graduate School for the Creation of New Photonics Industries, Japan, [3]Advanced Research Center for Beam Science, Institute for Chemical Research, Kyoto University, Japan

LN1-3 17:00

3x10^8 D-D neutron generation by high intensity laser irradiation onto inner surface of a spherical shell target
Nakahiro Satoh[1], T. Watari[2], K. Nishihara[2], R. Yoshimura[2], N. Akiyama[2], M. Takagi[2], T. Kawashima[2], Y. Abe[3], Y. Arikawa[3], A. Sunahara[4], Y. Hironaka[3], K. Shigemori[3], S. Fujioka[3], M. Nakai[3], H. Azechi[3]
[1]HAMAMATSU PHOTONICS K.K., Japan, [2]Central Research Laboratory, HAMAMATSU PHOTONICS K.K., Japan, [3]Institute of Laser Engineering, Osaka University, Japan, [4]Institute for Laser Technology, Japan

LN1-4 17:20

Development project for repetitive laser driven neutron source using diode pumped solid state laser
Ryohei Hanayama
The Graduate School for the Creation of New Photonics Industries, Japan

Oral, Tuesday, April 18 PM

HEDS <Room 311+312>

[HEDS4] 16:00-17:30
Application / High-Field Physics
Chair: M. Nishiuchi
QST, Japan

HEDS4-1 16:00 *Invited*

Visualization of Lattice Dynamics in Nanoscale Graphite Triggered by Femtoscond Laser Pulses
Wenxi Liang
HUST, P.R. China

HEDS4-2 16:30 *Invited*

Ultrafast Electron Diffraction and Microscopy using a Femtosecond-pulse Electron Beam
Jinfeng Yang
Osaka Univ., Japan

HEDS4-3 17:00 *Invited*

The effect of laser contrast on generation of highly charged Fe ions by ultra - intense femtosecond laser pulses
Anatoly Faenov
Osaka Univ., Japan

LSSE <Room 316>

LSSE2-5 15:10

Combining Raman and Laser Induced Breakdown Spectroscopy by Double Pulse Lasing
Vasily N. Lednev[1], Pavel A. Sdvizhenskii[1], Mikhail Ya. Grishin[2,3], Vladimir V. Bukin[3], A. N. Fedorov[3], Sergey M. Pershin[3]
[1]National University of Science and Technology MISiS, Russian Federation, [2]Moscow Institute of Physics and Technology (State University), Russian Federation, [3]Prokhorov General Physics Institute of Russian Academy of Sciences, Russian Federation

Oral, Wednesday, April 19 AM

Congress <Room 501+502>

9:00-12:10
OPIC Plenary Session

Oral, Wednesday, April 19 PM

ALPS & HEDS & XOPT <Room 302>

[ALPS, HEDS, XOPT Joint Session 1]
13:30-15:30
Chair: TBA

HEDSj-1 13:30 *Invited*

Implementation of Extreme Light Infrastructure-Nuclear Physics
Kazuo Tanaka
Extreame Light Infrastructure -Nuclear Physics (ELI-NP)

HEDSj-2 14:00 *Invited*

title TBD
Michael Campbell
University of Rochester, USA

ALPSj-1 14:30 *Invited*

Linking high harmonics from solids and gases
Paul B. Corkum
University of Ottawa, Canada

ALPSj-2 15:00 *Invited*

Recent Advances of the Apollon 10 PW Laser
Ji-Ping Zou[1], D. N. Papadopoulos[1], C. L. Blanc[1], F. Druon[2], L. Martin[1], A. Fréneaux[1], C. Bonnin[1], I. Taghzout[1], A. Beluze[1], N. Lebas[1], B. L. Garrec[1], F. Mathieu[1], and P. Audebert[1]
[1]Lab. pour l'Utilisation des Lasers Intenses, CNRS, Ecole Polytechnique, CEA, Univ. Pierre et Marie Curie, Palaiseau, France, [2]Lab. Charles Fabry, Inst. d'Optique, CNRS, Univ. Paris Sud, Palaiseau, France

----- 15:30-16:00 Break -----

[ALPS, HEDS, XOPT Joint Session 2]
16:00-17:00
Chair: M. Yabashi
RIKEN SPring-8 Center

XOPTj-1 16:00 *Invited*

Perfect X-ray focusing via fitting corrective glasses to aberrated optics
Christian G. Schroer
DESY/University of Hamburg, Germany

XOPTj-2 16:30 *Invited*

Probe into vacuum filed using high intensity X-ray
Shoji Asai
The University of Tokyo, Japan

----- 17:00-18:00 Break / Move -----

LDC & LEDIA <Room 301>

[LED-LDC1] 13:30-17:15
LEDIA LDC Joint Session
Chairs: Ryuji Katayama
Osaka University, Japan
Sunao Kurimura
National Institute for Materials Science, Japan

Opening Remarks 13:30-14:00
Hiroshi Amano
Nagoya University, Japan
Kazuo Kuroda
Utsunomiya University, Japan

LED-LDC1-1 14:00 *Invited*

IQE Quantification of Nitride Semiconductors Omnidirectional Photoluminescence (ODPL) Measurement Utilizing an Integrating Sphere
Kazunobu Kojima[1], Hirotaka Ikeda[2], Kenji Fujito[2], Shigefusa F. Chichibu[1]
[1]Tohoku University, Japan, [2]Mitsubishi Chemical Corporation, Japan

LED-LDC1-2 14:30 *Invited*

IQE Quantification of Nitride Semiconductors Photocurrent and Photoluminescence Measurements for InGaN Based LED
Shigeyoshi Usami, Yoshio Honda, Hiroshi Amano
Nagoya University, Japan

LED-LDC1-3 15:00 *Invited*

IQE Quantification of Nitride Semiconductors Simultaneous Photo-acoustic and Photoluminescence Measurements for InGaN Quantum Wells
Atushi A. Yamaguchi[1], Takashi Nakano[1], Shigeta Sakai[1], Haruki Fukada[1], Yuya Kanitani[2], Shigetaka Tomiya[2]
[1]Kanazawa Institute of Technology, Japan, [2]Sony Corporartion, Japan

----- 15:30-15:50 Break -----

LED-LDC1-4 15:50 *Invited*

Light Sources for Next Generation Lighting and Display Applications
Charles Li
Playnitride, Taiwan

LED-LDC1-5 16:20 *Invited*

Holographic display and its computational techniques
Tomoyoshi Shimobaba, Takashi Kakue, Tomoyoshi Ito
Chiba Univ., Japan

LED-LDC1-6 16:50 *Invited*

Projection Mapping
Hisayo Yoshida
PICS, Japan

BISC & OMC <Room 418>

[OMC and BISC Joint Symposium I]
13:30-15:10
Chair: Takashige Omatsu
Chiba Univ., Japan

OMC & BISC1-1 13:30 *Plenary*

Bioluminescent indicator applicable to membrane voltage recording in various excitable cell types
Takeharu Nagai
Osaka Univ., Japan

OMC & BISC1-2 14:10 *Invited*

Cellular biophysical markers of hydroxyurea treatment in sickle cell disease
Peter T. C. So
Massachusetts Institute of Technology, USA

OMC & BISC1-3 14:40 *Invited*

To be announced
Cornelia Denz
Westfälische Wilhelms-Univ. Münster, Germany

----- 15:10-15:40 Coffee Break -----

[OMC and BISC Joint Symposium II]
15:40-16:40
Chair: Osamu Matoba
Kobe Univ., Japan

OMC & BISC2-1 15:40

Wavefront correction enables vibrational imaging of bacteria with multimode fibre probes
Ivan Gusachenko, Mingzhou Chen, Kishan Dholakia
Univ. of St Andrews, UK

OMC & BISC2-2 15:55

Two-photon excitation microscopy with spatial light modulator
Naoya Matsumoto[1], Alu Konno[2], Takashi Inoue[1], Haruyoshi Toyoda[1], Toshiyuki Miwa[1], Kazuhiro Nakamura[1], Shigetoshi Okazaki[2]
[1]Hamamatsu Photonics K.K., Japan, [2]Hamamatsu Univ. School of Medicine, Japan

OMC & BISC2-3 16:10

Rhythmic motion of colloidal particles driven by optical force
Keita Saito, Yasuyuki Kimura
Kyushu Univ., Japan

OMC & BISC2-4 16:25

Thermo-plasmonic manipulation of living cyanobacteria on a gold nanostructure
Shota Naka, Tatsuya Shoji, Yasuyuki Tsuboi
Osaka City University, Japan

OMC & BISC2-5 16:40

Novel compact photoacoustic imaging system to explore the applications in the medical imaging field
Kaku Irisawa[1], Toshiro Hayakawa[1], Takatsugu Wada[1], Miya Ishihara[2]
[1]FUJIFILM Corp., Japan, [2]National Defense Medical College, Japan

[OPIC Reception] 18:00-20:00 <Room 501+502>

Tue, 19 April

Oral, Wednesday, April 19 PM

ALPS <Room 511+512>

[ALPS8] 13:30-15:15
Novel optical devices, materials, nanostructure and applications
Chairs: Takasumi Tanabe
Keio Univ., Japan
Takuo Tanaka
RIKEN, Japan

ALPS8-1 13:30 *Invited*

Expanding applicable optical sources in plasmonics and through a dispersionincreasing fiber
Chen-Bin Huang
Inst. of Photonics Tech., National Tsing Hua Univ., Taiwan

ALPS8-2 14:00 *Invited*

Metamaterial absorbers and their applications
Takuo Tanaka[1,2,3]
[1]RIKEN Metamaterials Lab., Japan, [2]RIKEN Innovative photon manipulation research team, Japan, [3]Tokyo Inst. of Tech., Japan

ALPS8-3 14:30

Nanofocused Surface Plasmon Pulses at 400 nm and 800 nm using an Aluminum Tapered Tip
K. Tomita, Y. Kojima, and F. Kannari
Keio Univ., Japan

ALPS8-4 14:45

Tuning Supermode Splitting for Stimulated Brillouin Scattering
Y. Honda[1], W. Yoshiki[1], T. Tetsumoto[1], S. Fujii[1], K. Furusawa[2], N. Sekine[2] and T. Tanabe[1]
[1]Keio Univ, Japan, [2]NICT, Japan

ALPS8-5 15:00

A Silicon Waveguide Platform with Large Misalignment Tolerance for Flip-Chip Based Hybrid Silicon/III-V Laser
H. Wang[1], W. Zheng[1,2]
[1]Lab. of Solid State Opt. Info. Tech., Inst. Semiconductors, CAS, China, [2]State Key Lab. on Int. Opt., Inst. Semiconductors, CAS, China

----- 15:15-15:45 Break -----

CLES / LANSA <Room 416+417>

[LN2] 13:20-XX:XX
XXXXX
Chair: XXXXX
XXXXX

LN2-1 13:20 *Invited*

Laser-driven neutron source: state of the art and applications on ILE
Akifumi Yogo[1,4], K. Koga[1], S. Tosaki[1], Y. Suzuki[1], K. Okamoto[1], Y. Arikawa[1], S. Fujioka[1], Y. Sentoku[1], Y. Abe[1], Y. Kato[1], M. Nakai[1], K. Mima[1,2], K. Yamanoi[1], T. Norimatsu[1], M. Kanasaki[3], K. Oda[3], T. Yamauchi[3], H. Azechi[1], H. Nishimura[1]
[1]Institute of Laser Engineering (ILE), Osaka University, Japan, [2]The Graduate School for the Creation of New Photonics Industries, Japan, [3]Graduate School of Maritime Sciences, Kobe University, Japan, [4]PRESTO, Japan Science and Technology Agency, Japan

LN2-2 14:00

Ion acceleration and neutron production in different types of targets
Yutong Li[1,2,3], Yihang Zhang[1,2], Weimin Wang[1,3]
[1]Beijing National Laboratory for Condensed Matter Physics, Institute of Physics, Chinese Academy of Sciences, China, [2]School of Physical Sciences, University of Chinese Academy of Sciences, China, [3]Collaborative Innovation Center of IFSA (CICIFSA), Shanghai Jiao Tong University, China

LN2-3 14:20

Quasimonoenergetic proton production through the coulomb explosion of spherical nanostructures
Myles Allen H. Zosa, Masakatsu Murakami
Institute of Laser Engineering, Osaka University, Japan

LN2-4 14:40

Compact neutron source using coulomb-explosion-generated quasimonoenergetic protons
Masakatsu Murakami, Myles-Allen Zosa, Kazumasa Fujinohara
Institute of Laser Engineering, Osaka University, Japan

ICNN <Room 414+415>

[Opening] 13:30-13:45
Opening Remarks
Y. Arakawa
The University of Tokyo

[ICNN1] 13:45-15:00
QDs and photonic crystals
Chair: XXXXX
XXXXX

ICNN1-1 13:45 *Invited*

On-chip Quantum Optics based on III-V Quantum Dots in Circuit Geometries
Maurice Skolnick[1,2]
[1]Department of Physics and Astronomy, University of Sheffield, UK, [2]University of Sheffield, UK

ICNN1-2 14:15

Quantum dot-nanocavity-waveguide coupled systems fabricated by transfer printing
Ryota Katsumi[1], Yasutomo Ota[2], Kazuhiro Kuruma[1], Akihito Tamada[1], Masahiro Kakuda[2], Toshiyuki Miyazawa[3], Kazuya Takemoto[3], Satoshi Iwamoto[1], Yasuhiko Arakawa[1]
[1]Institute of Industrial Science, The Univ. of Tokyo, Japan, [2]Institute for Nano Quantum Information Electronics, The Univ. of Tokyo, Japan, [3]Fujitsu Laboratories Ltd, Japan

ICNN1-3 14:30

Adiabatic Wavelength Conversion Through Free-Carrier Depletion Using pn-Junction-Loaded Photonic Crystal Waveguides
Keisuke Kondo, Toshihiko Baba
Yokohama Nat'l Univ., Japan

ICNN1-4 14:45

A Scheme for Generating Optical Vortex from a Quantum Dot using Degenerate Photonic Crystal Nanocavity Modes
Satoshi Iwamoto, Yasutomo Ota, Yasuhiko Arakawa
The University of Tokyo, Japan

----- 15:00-15:30 Break -----

Oral Program

Oral, Wednesday, April 19 PM

IP <Room 413>

[IP-19PM-1] 13:30-15:30
[Special Session] Photonic Intelligence
Chair: XXXXX
XXXXX

IP-19PM-1-1 13:30 *Invited*

A Coherent Ising Machine Based on Networked Optical Parametric Oscillators for Optimization Problems

Takahiro Inagaki[1], Yoshitaka Haribara[2,3], Koji Igarashi[4], Tomohiro Sonobe[3,5], Shuhei Tamate[3], Toshimori Honjo[1], Alireza Marandi[6], Peter McMahon[6], Takeshi Umeki[7], Koji Enbutsu[7], Osamu Tadanaga[7], Hirokazu Takenouchi[7], Kazuyuki Aihara[2], Ken-ichi Kawarabayashi[3,5], Kyo Inoue[4], Shoko Utsunomiya[3], Hiroki Takesue[1]
[1]NTT Basic Research Laboratories, Japan, [2]The University of Tokyo, Japan, [3]National Institute of Informatics, Japan, [4]Osaka University, Japan, [5]JST, Japan, [6]Stanford University, USA, [7]NTT Device Technology Laboratories, Japan

IP-19PM-1-2 14:00 *Invited*

Solving Ising Problems with All-to-All Network of Time-Multiplexed Optical Parametric Oscillators

Ryan Hamerly[1], Peter McMahon[1,2], Alireza Marandi[2], Shoko Utsunomiya[1], Yoshihisa Yamamoto[3]
[1]National Institute of Informatics, Japan, [2]Stanford University, USA, [3]JST, Japan

IP-19PM-1-3 14:30 *Invited*

Performance Improvement of Reservoir Computing by Using Two Temporal Outputs in Mutually Coupled Optoelectronic System

Kazutaka Kanno, Masatoshi Bunsen
Fukuoka University, Japan

IP-19PM-1-4 15:00 *Invited*

Structure and Fundamental Processes of Photonic Intelligence

Hirokazu Hori
University of Yamanashi, Japan

----- 15:30-15:45 BREAK -----

LNPC <Room 317>

[Opening] 13:25-13:30
Opening Remarks
K. Homma[1,2]
[1]Hiroshima Univ., Japan, [2]IZEST, Ecole Polytechnique, France

[LNPC1] 13:30-17:30
Fundamental physics in the extremely early universe
Chair: T. Namba
ICEPP, The univ. of Tokyo, Japan

LNPC1-1 13:30 *Invited*

Cosmic evolution and fundamental physics

M. Hazumi
KEK, Japan

LNPC1-2 14:20 *Invited*

Introduction to LiteBIRD - Light Satellite for studies for B-mode Polarization and Inflation from cosmic Background Radiation and Detection

S. Uozumi
Okayama Univ., Japan

LNPC1-3 14:50

Dilaton and PseudoDilaton

Y. Fujii
Waseda Univ., Japan

LSSE <Room 316>

[LSSE3] 13:10-15:10
Decommissioning and Monitoring for Power Reactors
Chair: Akihiko Nishimura
Japan Atomic Energy Agency, Japan

LSSE3-1 13:10 *Invited*

The composite-type optical fiberscope system and its industrial deployment

Kiyoshi Oka[1], Akihiko Nishimura[2]
[1]National Institutes for Quantum and Radiological Science and Technology, Japan, [2]Japan Atomic Energy Agency, Applied Laser Technology Institute, Japan

LSSE3-2 13:40

Nondestructive evaluation of plastic strain in carbon steels by magnetic incremental permeability method

Takanori Matsumoto[1], Tetsuya Uchimoto[2], Toshiyuki Takagi[2], Gerd Dobmann[3]
[1]Graduate School of Engineering, Tohoku University, Japan, [2]Institute of Fluid Science, Tohoku University, Japan, [3]Saarland University, Germany

LSSE3-3 14:00

Laser Ultrasonic Approach for Detecting a Deteriorated Rebar in Concrete

Akinori Furusawa[1], Akihiko Nishimura[1], Yusuke Takenaka[2]
[1]Japan Atomic Energy Agency, Japan, [2]A-tech Co. Ltd., Japan

LSSE3-4 14:20

Evaluation of the Applicability of Laser Measurement Techniques for the Instrumentation of Fast Reactors using Sodium Engineering Research Facility

Masashi Ueda, Koichi SARUTA, Toshihiko Yamaguchi
Japan Atomic Energy Agency, Japan

LSSE3-5 14:40 *Invited*

Development of laser techniques for decommissioning of Fukushima Daiichi Nuclear Power Station

Tomonori Yamada[1], Nguyen Phi Long[1], Toshihide Hanari[1], Takuya Shibata[1], Akihiko Nishimura[1], Shin-ichi Koyama[1], Hiroyuki Daido[1], Yoshinori Shimada[2], Oleg Kotyaev[2], Shinri Kurahashi[2]
[1]Japan Atomic Energy Agency, Japan, [2]Institute for Laser Technology

Oral, Wednesday, April 19 PM

ALPS <Room 511+512>

[ALPS9] 15:45-17:30
Biomedical Imaging
Chair: Masayuki Suzuki
Aichi-medi. Univ., Japan

ALPS9-1 15:45 *Invited*

In vivo two-photon imaging of brain and neurons using a high-peakpower gain-switched laser diode and adaptive optics
Tomomi Nemoto[1,2], R. Kawakami[1,2], T. Hibi[1], A. Tanabe[1,2]
[1]Research Inst. for Elec. Sci., Hokkaido Univ., Japan [2]Grad. school of info. Sci. and tech., Hokkaido Univ., Japan

ALPS9-2 16:15

Dynamics of Triplet/Dark State of Fluorescent Molecules in the Photobleaching Process
N. Sakata, S. Maesako, N. Kamiyama, K. Iwata, K. Toda, and A. Suda
Tokyo Univ. of Sci., Japan

ALPS9-3 16:30

Real Time Measurement of Folmaldehyde Using 3μm DIfference Frequency Laser
S. Sakai[1], M. Asobe[1], A. Katoh[1], A. Tokura[2]
[1]Tokai Univ., Japan, [2]NTT Corp., Japan

ALPS9-4 16:45 *Invited*

Ultrahigh resolution OCT with broadband fiber lasers
Norihiko Nishizawa, Hiroyuki Kawagoe, and Masahito Yamanaka
Dept. Electrical Eng., Nagoya Univ., Japan

ALPS9-5 17:15 *Invited*

Ultrahigh speed en face optical coherence tomography using two axis KTN optical beam deflectors
M. Ohmi[1], Y. Shinya[1], R. Tagashira[1], T. Imai[2], S. Tatsumi[2], S. Toyoda[2], T. Sakamoto[2]
[1]Grad. School of Med., Osaka Univ., Japan, [2]NTT Device Innovation Center, NTT Corp., Japan

----- 17:30-18:00 Break / Move -----

CLES / LANSA <Room 416+417>

[AP1] 15:20-XX:XX
XXXXX
Chair: XXXXX
XXXXX

AP1-1 15:20 *Invited*

Development and application of quasi-monoenergetic neutron/gamma sources from ion-driven nuclear reactions
Igor Jovanovic
University of Michigan, USA

AP1-2 16:00

Development of neutron resonance transmission analysis as a non-destructive assay technique for nuclear nonproliferation
Harufumi Tsuchiya, Fumito Kitatani, Makoto Maeda, Yosuke Toh, Masatoshi Kureta
Nuclear Science and Engineering Center, Japan Atomic Energy Agency, Japan

AP1-3 16:20

Industrial applications of compact neutron radiography
Haruo Miyadera, Koichi Nakayama, Kei Takakura, Tsukasa Sugita, Kenichi Yoshioka, Naoto Kume, Yoshiji Karino
TOSHIBA Corporation, Japan

[CN2] 16:40-XX:XX
XXXXX
Chair: XXXXX
XXXXX

CN2-1 16:40 *Invited*

Development of a portable neutron source based on inertial electrostatic confinement fusion and its application to active interrogation of special nuclear materials
Kai Masuda[1], Mahmoud A. Bakr[1], Tsuyoshi Misawa[2], Yoshiyuki Takahashi[2], Yasunori Kitamura[2], Masaya Yoshida[3], Norio Yamakawa[4], Atsushi Matsuda[4]
[1]Institute of Advanced Energy, Kyoto University, Japan, [2]Research Reactor Institute, Kyoto University, Japan, [3]Graduate School of Energy Science, Kyoto University, Japan, [4]Pony Industry Co. Ltd., Japan

CN2-2 17:20

A waterproof palm-sized neutron generator using inertial electrostatic confinement (IEC) fusion
Kei Takakura[1], Takayuki Sako[1], Haruo Miyadera[1], Kenichi Yoshioka[1], Yoshiji Karino[1], Daisuke Uematsu[1], Kohei Okumoto[2], Jun Hasegawa[2], Toshiyuki Kohno[2], Eiki Hotta[2]
[1]Toshiba Corporation, Japan, [2]Tokyo Institute of Technology, Japan

CN2-3 17:40

Construction of a compact, low-inductance, 100 J dense plasma focus for yield optimization studies
Christopher Cooper, Ihor Holod, Drew Higginson, Alexander Povilus, Steven Chapman, Steve Falabella, Yuri Podpaly, Brian Shaw, Jason Liu, Andrea Schmidt
Lawrence Livermore National Laboratory, USA

ICNN <Room 414+415>

[ICNN2] 15:30-17:00
Photonic nanostructures
Chair: XXXXX
XXXXX

ICNN2-1 15:30 *Invited*

Manipulating the Generalized Energy-bands by Nanostructure
Yidong Huang,Kaiyu Cui, Zhilei Huang
Dept. of Electronic Engineering, Tsinghua Univ., China

ICNN2-2 16:00

High Speed and Highly Efficient Si Optical Modulator with In-Situ B Doped Strained SiGe Layer
Junichi Fujikata[1], Jaehoon Han[2], Masataka Noguchi[1], Shigeki Takahashi[1], Mitsuru Takenaka[2], Takahiro Nakamura[1]
[1]PETRA, Japan, [2]Univ. of Tokyo, Japan

ICNN2-3 16:15

Continuous-Wave Operation of Photonic-Crystal Lasers Coupled to Si Waveguides
Koji Takeda[1], Takuro Fujii[1], Akihiko Shinya[2], Tai Tsuchizawa[1], Hidetaka Nishi[1], Eiichi Kuramochi[2], Masaya Notomi[2], Koichi Hasebe[1], Takaaki Kakitsuka[1], Shinji Matsuo[1]
[1]NTT Device Technology Labs., Japan, [2]NTT Basic Research Labs., Japan

ICNN2-4 16:30

Polarization Splitting Grating Coupler for a Silicon Photonics Receiver
Yohei Sobu, Seok-Hwan Jeong, Yu Tanaka
PETRA, Japan

ICNN2-5 16:45

A CMOS compatible in-plane compact wavelength demultiplexer based on photonic crystal nanocavities
Tomohiro Tetsumoto, Yuta Ooka, Nurul Ashikin Binti Daud, Naotaka Kamioka, Taku Okamura, Takasumi Tanabe
Keio University, Japan

[OPIC Reception] 18:00-20:00 <Room 501+502>

Oral, Wednesday, April 19 PM

IP <Room 413>

[IP-19PM-2] 15:45-17:30
Optical Signal Processing I
Chair: XXXXX
XXXXX

IP-19PM-2-1 15:45

Widely Applicable Coding Method for Optical Correlators Based on an Autoencoder

Hidenori Suzuki, Ikeda Kanami, Eriko Watanabe
University of Electro-Communications, Japan

IP-19PM-2-2 16:00

Improvement of Response Time in Dual-Wavelength Spatial Light Modulators via Overdrive Method

Hiroto Sakai, Yu Takiguchi, Naoya Matsumoto, Munenori Takumi, Hiroshi Tanaka, Hirokazu Asaine, Norihiro Fukuchi, Naohisa Mukozaka, Haruyoshi Toyoda
Hamamatsu Photonics K.K., Japan

IP-19PM-2-3 16:150

Reference- and Lens-Free Single-Pixel Holographic Camera

Ryoichi Horisaki, Hiroaki Matsui, Jun Tanida
Osaka University, Japan

IP-19PM-2-4 16:30

Two-Parameter Analysis of the Signal's Envelope as a Theoretical Basis for a New Trend in Optical Phase Measurements

Tatiana Yakovleva
Federal Research Center "Computer Science and Control" of Russian Academy of Sciences, Russia

IP-19PM-2-5 16:45

Optimization of Polynomial Order Based on Residuals of Interpolation in Higher-Order Transport of Intensity Phase Imaging

Koshi Komuro, Takanori Nomura
Wakayama University, Japan

IP-19PM-2-6 17:00

Point Spread Function Engineering for Snapshot Compressive Imaging

Esteban Vera[1], Pablo Meza[2]
[1]Pontificia Universidad Católica de Valparaíso, Chile, [2]Universidad de la Frontera, Chile

IP-19PM-2-7 17:15

An Aperture-Division Full-Stokes Vector Polarimetric Camera and its Polarimetric Imaging Applications

Liyong Ren[1], Wenfei Zhang[1,2,3], Jian Liang[1,2], Haijuan Ju[1,2], Zhaofeng Bai[1], Enshi Qu[1], Zhaoxin Wu[3]
[1]Xi'an Institute of Optics and Precision Mechanics, Chinese Academy of Sciences, China, [2]University of Chinese Academy of Sciences, China, [3]Xi'an Jiaotong University, China

LNPC <Room 317>

LNPC1-4 15:50 *Invited*

Production and evolution of axion dark matter in the early universe

K. Saikawa[1], T. Hiramatsu[2,3], M. Kawasaki[4,5], A. Ringwald[1], T. Sekiguchi[6]
[1]DESY, Germany, [2]YITP, Kyoto Univ., Japan, [3]Rikkyo Univ., Japan, [4]ICRR, The univ. of Tokyo, Japan, [5]Kavli IPMU, Japan, [6]IBS, Korea

LNPC1-5 16:30

Search for Axion-like Particles via optical-Parametric effects with High-Intensity laseRs in Empty Space over a wide mass range

K. Homma[1,2]
[1]Hiroshima Univ., Japan, [2]IZEST, Ecole Polytechnique, France

LNPC1-6 16:50

Probing pseudo Nambu-Goldstone bosons by stimulated photon colliders in the mass range 0.1 eV to 10 keV

Y. Toyota[1], K. Homma[1,2]
[1]Hiroshima Univ., Japan, [2]IZEST, Ecole Polytechnique, France

LNPC1-7 17:10

Preparatory experiments toward a search for sub-eV Dark Matter at Extreme Light Infrastructure-Nuclear Physics (ELI-NP)

L. Neagu[1], S. Ataman[1], M. Cuciuc[1], M. Hashida[2], K. Homma[3,4], S. Inoue[2], Y. Nakamiya[2], M. Rosu[1], S. Sakabe[2], O. Tesileanu[1], Y. Toyota[3]
[1]ELI-NP, IFIN-HH, Romania, [2]Kyoto Univ., Japan, [3]Hiroshima Univ., Japan, [4]IZEST, Ecole Polytechnique, France

LSSE <Room 316>

[LSSE4] 15:30-17:40
Social Infrastructure
Chair: Yoshinori Shimada
Institute for Laser Technology, Japan

LSSE4-1 15:30 *Invited*

Development of High-speed Defect Inspection Technique for Concrete Structure using Laser Hammering Method

Shinri Kurahashi[1], Toshiyuki Kitamura[1], Hajime Okada[2], Shuji Kondo[2], Katsuhiro Mikami[2], Noboru Hasegawa[2], Masaharu Nishikino[2], Yoshinori Shimada[1]
[1]Institute for laser technology, Japan, [2]National Institutes for Quantum and Radiological Science and Technology, Japan

LSSE4-2 16:00 *Invited*

Non-contact acoustic inspection method for civil engineering structure using air-borne sound and laser Doppler vibrometer

Tsuneyoshi Sugimoto[1], Kazuko Sugimoto[1], Noriyuki Uatagawa[2], Kageyoshi Katakura[3]
[1]Toin University of Yokohama, Japan, [2]SatoKogyo Co., Ltd, Japan, [3]Meitoku Engineering Laboratory, Japan

LSSE4-3 16:30

Development of Laser Cutting for Dismantling of Nuclear Facilities Using High Power Fiber Laser

Shin'ichi Toyama, Ryoya Ishigami
The Wakasa Wan Energy Research Center, Japan

LSSE4-4 16:50 *Invited*

Laser cleaning system using a kW-class fiber laser for maintenance of social infrastructures

Kazuhisa Fujita[1], Kazuaki Toyosawa[2], Hiromitsu Inagaki[3], Kazuhiro Takahara[2], Toyohiko Hongo[2], Tetsuaki Akiyoshi[2], Nobumitsu Maebashi[2], Shin-ichiro Okihara[1]
[1]The Graduate School for the Creation of New Photonics Industries, Japan, [2]Toyokoh Co., Ltd., Japan, [3]Chubu Electric Power Co., Inc., Japan

LSSE4-5 17:20

Deployment of sensing technologies to promote human resource development in Naraha Remote Technology Development Center of JAEA

Akihiko Nishimura, T. Shibata, T. Yamada, H. Suzaki, K. Shimada, Y. Sato, T. Torii, S. Koyama
Japan Atomic Energy Agency, Japan

[OPIC Reception] 18:00-20:00 <Room 501+502>

Oral, Thursday, April 20 AM

ALPS <Room 302>

[ALPS10] 9:00-10:30
High power lasers
Chair: Daniel Albach
Institute of Radiation Physics, HZDR, Germanuy

ALPS10-1 9:00 *Invited*

High Average Power Petawatt Laser Systems enabling the transition from proof-of-principle experiments to commercial applications (tentative)
Constantin Haefner
NIF Photon Science Lawrence Livermore National Laboratory, USA

ALPS10-2 9:30

Development of a 1-J, 300-Hz High-Power Diode- Pumped Laser System for High-Energy Materials Processing
T. Kurita[1,2], Y. Kato[1,2], T. Morita[1,2], T. Iguchi[1], T. Sekine[1,2], Y. Tamaoki[1,2], Y. Takeuchi[1,2], and T. Kawashima[1,2]
[1]Hamamatsu Photonics K.K., Japan, [2]ImPACT Program, Japan

ALPS10-3 9:45

Recent progress on Kumgang Laser - Coherent Beam Combination Laser using Self-controlled Stimulated Brillouin Scattering Phase Conjugate Mirrors (SBS-PCMs)
H. J. Kong[1], S. Park[1], S. Cha[1], S. Choi[1], H. Lee[1], J. Oh[1],and J. S. Kim[2]
[1]Dep. of Phys., KAIST, Korea, [2]Laser Spectronix, Korea

ALPS10-4 10:00

Advanced Multi-pass Amplification System using Yb:YAG Thin-disk Device
Y. Ochi, K. Nagashima, M. Maruyama, R. Itakura
Kansai Photon Sci. Inst., QST, Japan

ALPS10-5 10:15

Wavelength conversion of the 100 kHz, 100 W picosecond thin-disk laser from deep-UV to mid-IR
O. Novák[1], M. Vyvlečka[1,2], H. Turčičová[1], M. Smrž[1], L. Roškot[1,3], J. Mužík1,[3], M. Komanec[4], D. Suslov[4], S. Zvánovec[4], A. Endo[1], T. Mocek[1]
[1]HiLASE Centre, Inst. of Phys. AS CR, Czech Republic, [2]Faculty of Math. and Phys., Charles Univ., Czech Republic,[3]Faculty of Nucl. Sci. and Phys. Eng., Czech Tech. Univ., Czech, Republic, [4]Faculty of Elect. Eng., Czech Tech. Univ., Czech Republic

----- 10:30-11:00 Break -----

ALPS <Room 511+512>

[ALPS11] 9:00-10:30
New Materials for Laser Control
Chair: Sunao Kurimura
NIMS, Japan

ALPS11-1 9:00 *Invited*

New Ba-Based Crystals for Nonlinear Frequency Conversion in the Mid-IR
Valentin Petrov[1], V. V. Badikov[2], D. V. Badikov[2], V. B. Laptev[3], K. V. Mitin[4], G. S. Shevyrdyaeva[2], A. Kwasniewski[5], E. Boursier[6,7], N. I. Shchebetova[4], A. Tyazhev[1], G. Marchev[1], V. Panyutin[1], P. Segonds[6,7], B. Boulanger[6,7]
[1]Max-Born-Inst. for Nonlinear Optics and Ultrafast Spectroscopy, Germany, [2]High Tech. Lab., Kuban State Univ., Russia, [3]Inst. of Spectroscopy, Russian Academy of Sci., Russia, [4]Astrophysika National Laser Centre, Russia, [5]Leibniz Inst. for Crystal Growth, Germany, [6]Univ. Grenoble Alpes, Inst. NEEL, France, [7]CNRS, Inst. NEEL, France,

ALPS11-2 9:30 *Invited*

Broadband ultrafast nonlinear photonics in nanocarbons
Fabian Rotermund
KAIST, Korea

ALPS11-3 10:00

Growing Carbon Nanotubes on a Silica Toroid Microcavity to Observe Saturable Absorption
N. Hirota, W. Yoshiki, A. Hori, K. Namiki, K. Sato, H. Maki, and T. Tanabe
Keio Univ. Japan

ALPS11-4 10:15

Growth, Spectroscopy and Laser Operation of a Novel Disordered Tetragonal Tungstate Crystal - Tm:$Na_2La_4(WO_4)_7$
L. Z. Zhang[1], Z.B. Lin[1], X. Mateos[2,3], P. Loiko[4], J. M. Serres[3], Y.C. Wang[2], U. Griebner,[2], V. Petrov[2], M. Aguiló[3], F. Díaz[3], E. Vilejshikova[5], K. Yumashev[5], H.F.Lin[1], G. Zhang[1] and W.D. Chen[1,2]
[1]Key Lab. of Optoelectronic Materials Chemistry and Phys., Fujian Inst. of Res. on the Structure of Matter, Chinese Academy of Sci., Fujian, China, [2]Max-Born- Insti. for Nonlinear Opt. and Ultrafast Spectroscopy, Germany, [3]FiCMA-FiCNA, Univ. Rovira i Virgili (URV), Spain, [4]ITMO Univ., Russia, [5]Center for Optical Materials and Tech., BNTU, Belarus

----- 10:30-11:00 Break -----

BICS <Room 419>

[Opening] 8:45-9:00
Opening Remarks
Toyohiko Yatagai
Utsunomiya Univ., Japan

[BICS3] 9:00-10:15
Brain Imaging and Raman Microscopy
Chair: Osamu Matoba
Kobe Univ., Japan

BICS3-1 9:00 *Invited*

Brain connectomics imaging in schizophrenia study
Wen-Yih Tseng
National Taiwan Univ., Taiwan

BICS3-2 9:30 *Invited*

Improvement of spatial and spectral resolution in Raman microscopy
Katsumasa Fujita
Osaka Univ., Japan

BICS3-3 10:00

Label-free characterization of degenerative changes in articular cartilage by Raman spectroscopy
Yusuke Oshima, Mayu Akehi, Hiroshi Kiyomatsu, Hiromasa Miura
Ehime Univ., Japan

----- 10:15-10:45 Coffee Break -----

Oral, Thursday, April 20 AM

CLES / LANSA <Room 416+417>

[FAC] 9:00-XX:XX
XXXXX
Chair: XXXXX
XXXXX

FAC-1 9:00 *Invited*

Current status of high intensity pulsed spallation neutron source of J-PARC
Hiroshi Takada
Japan Atomic Energy Agency, Japan

FAC-2 9:40 *Invited*

Present status of chinese spallation neutron source project
Xuejun Jia
Institute of Physics, CAS, China

FAC-3 10:20

J-PARC transmutation experimental facility program
Fujio Maekawa
Japan Atomic Energy Agency, Japan

HEDS <Room 311+312>

[HEDS5] 9:10-10:30
Plenary (ImPACT Session IV)
Chair: E. Miura
AIST, Japan

HEDS5-1 9:10 *Plenary*

Integrating Advanced Accelerator and High-Power Laser Technologies to Overcome Current Limitations
Hitoshi Tanaka
JASRI, Japan

HEDS5-2 9:50 *Plenary*

EuPRAXIA - A European Project for Pioneering Applications with Plasma Accelerators
Ralph Assmann
DESY, Germany

----- 10:30-11:00 Break -----

ICNN <Room 414+415>

[ICNN3] 9:00-10:30
Quantum light
Chair: XXXXX
XXXXX

ICNN3-1 9:00 *Invited*

Nanophotonic quantum light emitting devices based on semiconductor quantum dots and 2D materials
Sven Hoefling, Yu-Ming He, Stefan Gerhardt, Sebastian Unsleber, Oliver Iff, Nils Lundt, Christian Schneider
Wuerzburg University, Germany

ICNN3-2 9:30

Spin-dependent Directional Emission from a Quantum Dot Ensemble Embedded in an Asymmetric Optical Waveguide
Wenbo Lin[1], Yasutomo Ota[2], Satoshi Iwamoto[1], Yasuhiko Arakawa[1]
[1]Institute of Industrial Science, The University of Tokyo, Japan, [2]Institute for Nano Quantum Information Electronics (NanoQuine) , The University of Tokyo, Japan

ICNN3-3 9:45

Lifetime measurement of a single GaN fluctuation quantum dot based on its power dependent single photon emission dynamics
Kang Gao[1,2], Mark Holmes[3], Munetaka Arita[1], Yasuhiko Arakawa[1]
[1]Institute of Industrial Science, University of Tokyo, Japan, [2]Institute of Industrial Science, University of Tokyo, Japan, [3]Institute of Industrial Science, University of Tokyo, Japan, UK

ICNN3-4 10:00

Observation of the Purcell effect in a plasmonic microring resonator embedding self-assembled quantum dots
Akihito Tamada[1], Yasutomo Ota[2], Kazuhiro Kuruma[1], Jinfa Ho[2], Katsuyuki Watanabe[2], Satoshi Iwamoto[2], Yasuhiko Arakawa[2]
[1]Institute of Industrial Science, The University of Tokyo, Japan, [2]Institute for Nano Quantum Information Electronics, The University of Tokyo, Japan

ICNN3-5 10:15

High-Q photonic crystal double-hetero structure nanocavity with Er,O-codoped GaAs
Masayuki Ogawa, Natsuki Fujioka, Kanji Sakuragi, Taiki Kishina, Takanori Kojima, Yasufumi Fujiwara
Division of Materials and Manufacturing Science, Graduate School of Engineering, Osaka University, Japan

----- 10:30-11:00 Break -----

Oral, Thursday, April 20 AM

IP <Room 413>

[IP-20AM-1] 9:00-10:30
Optical Signal Processing II
Chair: XXXXX
XXXXX

IP-20AM-1-1 9:00

Single Pixel Imaging with 1-D Hadamard Transform and Frequency Multiplexing
Kouichi Nitta, Kazuki Morimoto, Shinji Hayashi, Osamu Matoba
Kobe University, Japan

IP-20AM-1-2 9:15

Depth Extraction from Image Contrast using Retroreflective Structure
Sungwon Choi, Sung-Wook Min, Junkyu Yim
Kyung Hee University, Republic of Korea

IP-20AM-1-3 9:30

Single-Shot Fast Phase Retrieval in the Holographic Data Storage
Xiao Lin[1], Tsutomu Shimura[2], Ryushi Fujimura[3], Yoshito Tanaka[2], Masao Endo[2], Jinpeng Liu[1], Jinyan Liu[1], Yong Huang[1], Xiaodi Tan[1]
[1]Beijing Institute of Technology, China, [2]The University of Tokyo, Japan, [3]Utsunomiya University, Japan

IP-20AM-1-4 9:45

Elimination Method for the Zero-Order Term in Off-Axis Digital Holography Utilizing Spatial-Carrier Frequency Analysis
Erkhembaatar Dashdavaa, Nam Kim
Chungbuk National University, Republic of Korea

IP-20AM-1-5 10:00

Inkjet-printed 3D Structure Projecting Multiple Full-Color Images
Ryuji Hirayama[1,2], Tomotaka Suzuki[1], Tomoyoshi Shimobaba[1], Atsushi Shiraki[1], Makoto Naruse[3], Hirotaka Nakayama[4], Takashi Kakue[1], Tomoyoshi Ito[1]
[1]Chiba University, Japan, [2]JSPS, Japan, [3]National Institute of Information and Communications Technology, Japan, [4]National Astronomical Observatory of Japan, Japan

IP-20AM-1-6 10:15

Design and Investigation of Computer-Generated Fourier Holograms of Colored 3D Objects
Michael Golub, Michael Parchomovsky
Tel Aviv University, Israel

----- 10:30-11:00 BREAK -----

LDC <Room 301>

[LDC1] 9:10-10:30
Pleanary Session
Co Chairs: Tetsuya Yagi
Mitsubishi Electric Corp., Japan
Shevlin Fergal
Dyoptika, Ireland

LDC1-1 9:10 *Invited*

The Initiatives of Market Direction and Activation of the Gallium Nitride Based Laser Diode for Laser Display
Shigeki Okauchi, Atsutomo Hama
Nichia Corp., Japan

LDC1-2 9:50

Laser Phospher based projector
Fei Hu
Appotronics, China

LEDIA <Room 411+412>

[LED1] 9:00-10:00
Characterizations
Chairs: Atsushi A. Yamaguchi
Kanazawa Institute of Technology, Japan
Young Joo Kim
Yonsei University, Korea

LED1-1 9:00 *Invited*

Evaluation of Nitrides Semiconductors Using Terahertz Time-Domain Spectroscopic Ellipsometry
Tsutomu Araki
Ritsumeikan University, Japan

LED1-2 9:30

Quantitative Evaluation of Internal Quantum Efficiency in InGaN Light-Emitting Diodes at Room Temperature
Jong-In Shim[1], Dong-Pyo Han[1], Dong-Soo Shin[1], Hyundon Jung[2]
[1]Hanyang University, Korea, [2]EtaMax Co., Korea

LED1-3 9:45

A study on internal quantum efficiency of polar GaN/InGaN multi-quantum-well structures through time-resolved photoluminescence measurement
Yuchen Xing, Lai Wang, Di Yang, Zilan Wang, Zhibiao Hao, Changzheng Sun, Bing Xiong, Yi Luo, Yanjun Han, Jian Wang, Hongtao Li
Tsinghua University, China

[LEDp2] 10:00-11:57
Short Presentations for Poster Session
Chairs: Hisashi Murakami
Tokyo University of Agriculture and Technology, Japan
Tomohiro Yamaguchi
Kogakuin University, Japan

Poster session program p.XX

----- 10:30-10:45 Break -----

Oral, Thursday, April 20 AM

LNPC <Room 317>

[LNPC2] 09:00-10:30
New gamma-ray sources
Chair: Y. Nakamiya
ICR, Kyoto Univ., Japan

LNPC2-1 09:00

Gamma-beam experiments at ELI-NP: The future is emerging
D. L. Balabanski
ELI-NP, IFIN-HH, Romania

LNPC2-2 09:30 *Invited*

The Gamma Factory initiative for CERN
M. W. Krasny
UPMC, France

LNPC2-3 10:00 *Invited*

Intense gamma radiation by accelerated quantum ions
N. Sasao[1], H. Hara[1], T. Hiraki[1], Y. Honda[2], Y. Ichikawa[3], O. Kamigaito[3], Y. Kanai[4], T. Nagatomo[3], T. Nakagawa[3], T. Matsuda[1], Y. Miyamoto[1], K. Sakaue[5], S. Uetake[1], K. Yokoya[2], M. Yoshida[2], A. Yoshimi[1], K. Yoshimura[1], M. Yoshimura[1]
[1]RIIS, Okayama Univ., Japan, [3]RIKEN Nishina Center, Japan, [4]Physics Research Unit, RIKEN, Japan, [5]WIAS, Waseda Univ., Japan, [2]KEK, Japan

OMC <Room 418>

[Opening] 9:00-9:15
Opening Remarks
Takashige Omatsu
Chiba Univ., MCRC Chiba Univ., Japan

[OMC1] 9:15-10:30
Optical Manipulation I
Chair: Keiji Sasaki
Hokkaido Univ., Japan

OMC1-1 9:15 *Invited*

Optical tweezers for stretching, division and balance
Alexander B. Stilgoe, Itia A. Favre-Bulle, Anatolii V. Kashchuk, Halina H. Rubinsztein-Dunlop
The Univ. of Queensland, Australia

OMC1-2 9:45 *Invited*

Optical manipulation of hot nanoparticles can mediate selected cell fusion
Lene B. Oddershede, Azra Bahadori, Poul M. Bendix
Niels Bohr Institute, Denmark

OMC1-3 10:15

Molecular dynamics in an optical trap of glutamate receptors labeled with quantum-dots on living neurons
Tatsunori Kishimoto[1,2], Yasuyo Maezawa[1], Suguru N. Kudoh[2], Takahisa Taguchi[1], Chie Hosokawa[1]
[1]National Institute of Advanced Industrial Science and Technology, Japan, [2]Kwansei Gakuin Univ., Japan

----- 10:30-11:00 Coffee Break -----

XOPT <Room 313+314>

[Opening] 8:55-9:00
Opening Remarks
Kazuto Yamauchi
Osaka University, Japan

[XOPT1] 9:00-10:30
Imaging, microscopy & ptychography (I)
Chair: H. Mimura
The University of Tokyo

XOPT1-1 9:00 *Invited*

Optics for Lensless X-Ray Microscopy
Andreas Menzel
Paul Scherrer Institut, Switzerland

XOPT1-2 9:30 *Invited*

High-resolution hard X-ray spectro-ptychography
Yukio Takahashi[1], Nicolas Burdet[2], Makoto Hirose[1], Kei Shimomura[1]
[1]Osaka University, Japan, [2]RIKEN SPring-8 Center, Japan

XOPT1-3 10:00 *Invited*

Recent Developments in X-ray Phase Imaging and X-ray Phase Tomography
Atsushi Momose
Tohoku University, Japan

----- 10:30-11:00 Break -----

Oral, Thursday, April 20 AM

ALPS <Room 302>

[ALPS12] 11:00-12:15
New lasers
Chair: Martin Smrz
HiLASE centre, Institute of Physics ASCR, Czech Republic

ALPS12-1 11:00 *Invited*

Semiconductor laser pumped visible rare-earth doped lasers
Christian Kränkel[1,2,3]
[1]Zentrum für Lasermaterialien, Leibniz-Institut für Kristallzüchtung, Germany, [2]Institut für Laser-Physik, Univ. Hamburg, Germany, [3]The Hamburg Centre for Ultrafast Imaging, Germany

ALPS12-2 11:30

Highly beam quality PCSEL pumped Yb:YAG laser with near theory limited slope efficiency
X. Guo[1,3], S. Tokita[1], H. Nishida[1], K. Hirose[2], T. Sugiyama[2], A. Watanabe[2], K. Ishizaki[3], S. Noda[3], N. Miyanaga[1], and J. Kawanaka[1]
[1]ILE. Osaka Univ., Japan, [2]Hamamatsu Photonics K.K., Japan, [3]Kyoto Univ., Japan

ALPS12-3 11:45

New Concept on Thermal-Lens-Free Solid State Lasers – A Heat Capacitive Active Mirror Laser –
K. Ueda[1,2,3,4,5,6]
[1]Inst. Laser Sci., Univ. of Electro-Communications, Japan, [2]ILE, Osaka Univ., Japan, [3]Hamamatsu Photonics K.K., Japan, [4]Toyota Phys. Chem. Res. Inst., Japan, [5]JST SAKIGAKE, Japan, [6]Inst. Appl. Phys., RAS, Russian

ALPS12-4 12:00

Laser-induced damage in silica glasses with double pulses irradiation
S. Motokoshi[1], Y. Takemura[2], M. Yoshida[2], T. Jitsuno[3], M. Yoshimura[3]
[1]Inst. for Laser Tech., Japan, [2]Kindai Univ.,Japan, [3]ILE Osaka Univ., Japan

----- 12:15-13:15 Lunch Break -----

ALPS <Room 511+512>

[ALPS13] 11:00-12:00
Physics and Materials for Photo Emission Control
Chair: Atsushi Sanada
Osaka Univ., Japan

ALPS13-1 11:00 *Invited*

Photonic Dirac cones and relevant physics
Kazuaki Sakoda
NIMS, Japan

ALPS13-2 11:30

Optical properties of large diameter CaF_2 and Yb^{3+}:CaF_2 for high energy laser applications
K. Inaba[1], G. von der Gönna[1], J. Körner[2], and T. Töpfer[1]
[1]Hellma Materials, Germany, [2]Institute of Optics and Quantum Electronics, Germany

ALPS13-3 11:45

Stable Amplified Spontaneous Emission from Perovskite $CsPb_2Br_5$ Microplate
J. Du[1], Z. Hu[2], Z. Liu[1], X. Tang[2], Y. Leng[1]
[1]State Key Lab. of High Field Laser Phys., Shanghai Inst. of Opt. and Fine Mech., Chinese Acad. of Sci., China, [2]Key Lab. of Optoelectronic Tech. and Sys. (Ministry of Ed.), College of Optoelectronic Eng., Chongqing Univ., China

----- 12:00-13:15 Lunch Break -----

BICS <Room 419>

[BICS4] 10:45-12:00
Imaging in Turbid Media
Chair: Eiji Okada
Keio Univ., Japan

BICS4-1 10:45 *Invited*

Investigation of light scattering characteristics of individual leukocytes using three-dimensional refractive index maps
Kung-Bin Sung
National Taiwan University, Taiwan

BICS4-2 11:15 *Invited*

Imaging through scattering media with single-pixel detection
Esther Irles[1], Fernando Soldevila[1], Yessenia Jáuregui Sanchez[1], Pere J. Clemente Pesudo[1], Vicente Durán-Bosch[1], Enrique Tajahuerce[1], Pedro Andrés Bou[2], Pablo Artal[3], Jesús Lancis[1]
[1]Univ. Jaume I, Spain, [2]Univ. de València, Spain, [3]Lab. de Óptica Univ. de Murcia, Spain

BICS4-3 11:45

Fundamental study for scattering suppression in biological tissue using digital phase-conjugate light with intensity modulation
Sogo Toda[1], Yuji Kato[1], Nobuki Kudo[1], Koichi Shimizu[2]
[1]Hokkaido Univ., Japan, [2]Waseda Univ., Japan

----- 12:00-13:30 Lunch -----

Oral Program

Oral, Thursday, April 20 AM

CLES / LANSA <Room 416+417>

FAC-4 11:00 *Invited*

Gamma above neutron threshold experiments at extreme light infrastructure - nuclear physics

Dan Filipescu[1,2], Gheorghe Ciocan[1,2], Dan Ghita[1,2], Ioana Gheorghe[1,2,3], Tudor Glodariu[1,2], Franco Camera[4,5], Hiroaki Utsunomiya[6,7], Vladimir Varlamov[8]
[1]Extreme Light Infrastructure - Nuclear Physics, Romania, [2]Horia Hulubei National Institute for R&D in Physics and Nuclear Engineering, Bucharest-Magurele, Romania, [3]University of Bucharest, Romania, [4]University of Milano, Department of Physics, [5]INFN section of Milano, Romania, [6]Department of Physics, Konan University, [7]Center for Nuclear Study, University of Tokyo, Romania, [8]Skobeltsyn Institute of Nuclear Physics, Romania

FAC-5 11:40 *Invited*

Enhanced efficiency moderator-reflector systems for neutron sources

Ferenc Mezei
European Spallation Source ERIC/HAS Wigner Research Center for Physics, Sweden

HEDS <Room 311+312>

[HEDS6] 11:00-12:30
Beams/ Rad. Source (ImPACT Session V)
Chair: H. Tanaka
JASRI, Japan

HEDS6-1 11:00 *Invited*

Plasma devices for relativistic electron beams

Cédric Thaury
LOA, France

HEDS6-2 11:30 *Invited*

Progress of the COXINEL application of laser plasma acceleration

Marie-Emmanuelle Couprie
SOLEIL, France

HEDS6-3 12:00 *Invited*

Betatron x-ray radiation in the self-modulated acceleration regime

Félicie Albert
LLNL, USA

----- 12:30-13:30 Lunch Break -----

ICNN <Room 414+415>

[ICNN4] 11:00-12:00
CQED and superconductors
Chair: XXXXX
XXXXX

ICNN4-1 11:00 *Invited*

Dynamic Control of CQED Effects in Switched Optical Microcavities

Jean-Michel GERARD[1,2], Emanuel PEINKE[2], Tobias SATTLER[2], Joël BLEUSE[2], Julien CLAUDON[2], Gaston HORNECKER[2], Emre YUCE[3], Henri Thyrrestrup[3], Willem L VOS[3]
[1]CEA/INAC Grenoble, FRANCE, [2]CEA/INAC, FRANCE, [3]Twente Univ., The Netherlands

ICNN4-2 11:30

Hybrid Semiconductor-Superconductor Optoelectronic Devices

Alex Hayat, Dmitry Panna, Shlomi Bouscher, Leonid Rybak
Department of Electrical Engineering, Technion, Haifa 32000, Israel

ICNN4-3 11:45

Si-waveguide-integrated Superconducting Nanowire Single-photon Detector with Low-loss Spot-size Converter

Tatsurou Hiraki[1], Tai Tsuchizawa[1], Hiroyuki Shibata[2], Shinji Matsuo[1]
[1]NTT Device Technology Laboratories, Japan, [2]Kitami Institute of Technology, Japan

----- 12:00-13:00 Lunch -----

Oral, Thursday, April 20 AM

IP <Room 413>

[IP-20AM-2] 11:00-12:00
Information Photonics Tutorial
Chair: XXXXX
XXXXX

IP-20AM-2-1 11:00 *Invited*

Marriage between Holography and Statistical Optics for Unconventional Imaging: Coherence Holography and Holographic Correloscopy (A Tutorial)
Mitsuo Takeda
Utsunomiya University, Japan

LDC <Room 301>

[LDC2] 11:00-12:00
Projection Technology
Co Chairs: Satoshi Ouuchi
Hitachi, Ltd., Japan
Jae Kwon
LG Electronics, Korea

LDC2-1 11:00

Performance of RGB Laser Based Projection for Video Walls
Peter Hickl
Barco, Germany

LDC2-2 11:15

Laser Beam Scanning Short Throw Displays and an Exploration of Laser-Based Virtual Touchscreens
Jari O. Honkanen, P. Selvan Viswanathan
MicroVision Inc., USA

LDC2-3 11:30

Image Quality of Retinal Projection Laser Eyewear: How to Achieve High Resolution and Free Focus in Proper Balance
Makoto Suzuki, Kenji Yasui, Kinya Hasegawa, Nori Miyauchi and Mitsuru Sugawara
QDLaser, Inc., Japan

LDC2-4 11:45

Electro-Optic Bragg Diffraction Type Spatial Light Modulator Using Periodically Poled Structures for Laser Displays
Yuta Hayashi, Toshiyuki Inoue, Hiroshi Murata, Atsushi Sanada
Osaka Univ., Japan

LEDIA <Room 411+412>

----- 11:57-13:15 Lunch -----

Oral, Thursday, April 20 AM

LNPC <Room 317>

[LNPC3] 10:50-12:30
Physics in intense fields
Chair: A. Ilderton
Plymouth Univ., UK

LNPC3-1 10:50 *Invited*

Neutrino decay to electron and W-boson in a superstrong magnetic field in the Early Universe

A. Kuznetsov, A. Okrugin, A. Mosichkin, A. Shitova
Demidov Univ., Russia

LNPC3-2 11:30 *Invited*

Interplay between strong fields in QED and QCD

K. Itakura
KEK, Japan

LNPC3-3 12:00 *Invited*

Strong-field QED in tightly focused laser beams

A. Di Piazza
MPI, Germany

OMC <Room 418>

[OMC2] 11:00-12:00
Optical Manipulation II
Chair: Satoshi Ashihara
The Univ. of Tokyo, Japan

OMC2-1 11:00 *Invited*

Photonic entanglement processing with a single sub-wavelength structure

Gabriel Molina-Terriza, Mathieu Juan
Macquarie Univ, Australia

OMC2-2 11:30

Single orbital angular momentum mode emission from vertical cavity surface emitting laser by optical feedback

Yasunori Toda[1], Kyohhei Shigematsu[1], Keisaku Yamane[1], Ryuji Morita[1], Yoshinari Awaji
[1]Hokkaido Univ, Japan, [2]National Institute of Information and Communications Technologies, Japan

OMC2-3 11:45

Experimental generation of Bessel-Gauss coherence functions

Salla Gangi Reddy[1], Ravindra Pratap Singh[2], Yoko Miyamoto[1]
[1]The Univ. of Electro-Communications, Japan, [2]Physical Research Lab., India

----- 12:00-13:30 Lunch Break -----

XOPT <Room 313+314>

[XOPT2] 11:00-12:00
Imaging, microscopy & ptychography (II)
Chair: Y. Takahashi
Osaka University

XOPT2-1 11:00

Progress in X-ray phase contrast imaging based on random modulation

Sebastien Berujon, Eric Ziegler
ESRF, France

XOPT2-2 11:15

Simultaneous Image Reconstruction of Attenuation, Scatter and Phase Using the Compressed Sensing in Sparse-View Phase CT

Ryosuke Ueda, Hiroyuki Kudo
University of Tsukuba, Japan

XOPT2-3 11:30

Achromatic and High-Resolution Full-Field X-ray Microscope and its Applications

Satoshi Matsuyama[1], Jumpei Yamada[1], Shuhei Yasuda[1], Yoshiki Kohmura[2], Hiromi Okada[3], Yasuhisa Sano[1], Makina Yabashi[2], Tetsuya Ishikawa[2], Kazuto Yamauchi[1]
[1]Osaka University, Japan, [2]RIKEN SPring-8 Center, Japan, [3]JTEC Corporation, Japan

XOPT2-4 11:45

Development of precision sub-arcsecond-resolution Wolter mirrors for future X-ray observations of the Sun

Taro Sakao[1], Satoshi Matsuyama[2], Takumi Goto[2], Jumpei Yamada[2], Shuhei Yasuda[2], Kazuto Yamauchi[2], Yoshiki Kohmura[3], Yoshinori Suematsu[4]
[1]ISAS/JAXA, Japan, [2]Osaka University, Japan, [3]RIKEN SPring-8 Center, Japan, [4]National Astronomical Observatory, Japan

----- 12:00-13:30 Lunch -----

Oral, Thursday, April 20 PM

ALPS

[ALPSp14] 13:15-15:00
Poster Session
<Exhibition Hall A>
Poster session program p.XX

BICS <Room 419>

[BICS5] 13:30-15:00
Digital Holography and Microscopy
Chairs: Peter T. C. So
Massachusetts Institute of Technology, USA
Yuan Luo
National Taiwan Univ., Taiwan

BICS5-1 13:30 *Invited*

Holographic Techniques for Cellular Fluorescence Microscopy
Myung K. Kim
Univ. of South Florida, USA

BICS5-2 14:00

Three-dimensional imaging of micro-specimen by optical scanning holography
Jung-Ping Liu, Cheng-Hao Tsou
Feng Chia Univ., Taiwan

BICS5-3 14:15

Microscopic video observation of capillary vessel systems using diffuse back lighting
Minako Sakai, Kiroki Arai, Toshiaki Iwai
Tokyo Univ. of Agriculture and Technology, Japan

BICS5-4 14:30

Defect inspection of actuator lenses using swept-source optical coherence tomography
Jaeyul Lee[1], Kibeom Park[2], Jaewon Song[1], Mansik Jeon[1], Jeehyun Kim[1]
[1]Kyungpook National Univ., Korea, Republic of, [2]Oz-tec Co., Ltd., Korea, Republic of

BICS5-5 14:45

Absorption contrast imaging beyond the diffraction limit with electron-beam excitation assisted optical microscope
Wataru Inami[1], Masahiro Fukuta[1], Yoshimasa Kawata[1], Susumu Terakawa[2]
[1]Shizuoka Univ., Japan, [2]Tokoha Univ., Japan

----- 15:00-15:20 Coffee Break -----

CLES / LANSA <Room 416+417>

[POS] 13:30-XX:XX
<Exhibition Hall A>
Poster session program p.XX

[ND1] 15:00-XX:XX
XXXXX
Chair: XXXXX
XXXXX

ND1-1 15:00

Techniques to measure absolute neutron spectrum and intensity for accelerator based neutron source for BNCT
Isao Murata, Shingo Tamaki, Yuuki Ohtani, Yuta Ohsawa, Yusuke Kashiwagi, Sachie Kusaka, Fuminobu Sato
Division of Sustainable Energy and Environmental Engineering, Graduate School of Engineering, Osaka University, Japan

[ND1] 15:20-XX:XX
XXXXX
Chair: XXXXX
XXXXX

ND1-2 15:20

Design of epi-thermal neutron flux intensity monitor for boron neutron capture therapy
Yusuke Kashiwagi[1], Xingcai Guan[2], Isao Murata[3]
[1]Osaka university, Japan, [2]School of Nuclear Science and Technology, Lanzhou University, Japan, [3]Division of Suitable Energy and Environment Engineering, Graduate School of Engineering, Osaka University, Murata Laboratory, Japan

ND1-3 15:40

Development of sealed-type capillary plate gas detector for neutron imaging
Haruyasu Kondo[1], Hiroyuki Sugiyama[1], Masahiro Hayashi[1], Teruyuki Okada[1], Fuyuki Tokanai[2], Takayuki Sumiyoshi[3], Ryutaro Ito[2], Satoshi Ishizawa[2], Yuichiro Inomata[2], Kento Suzuki[2], Seiji Tasaki[4], Masanori Hirose[4], Masahiro Hino[4], Ryohei Hanayama[5]
[1]Hamamatsu Photonics K.K, Japan, [2]Yamagata University, Japan, [3]Tokyo Metropolitan University, Japan, [4]Kyoto University, Japan, [5]The Graduate School for the Creation of New Photonics Industries, Japan

Oral, Thursday, April 20 PM

HEDS <Room 311+312>

[HEDSp7] 13:30-15:00
Poster Session
<Exhibition Hall A>
Poster session program p.XX

----- 15:00-15:15 Break -----

ICNN <Room 414+415>

Poster session 13:00-15:00
<Exhibition Hall A>
Poster session program p.XX

IP <Room 413>

[IP-20PM-1] 13:30-15:00
Imaging and Holography
Chair: XXXXX
XXXXX

IP-20PM-1-1 13:30

Image-based Link Between Frequency Comb Profilometer and Optical Interferometer
Quang Duc Pham, Yoshio Hayasaki
Utsunomiya University, Japan

IP-20PM-1-2 13:45

Exposure Fusion Based on Luminance and Contrast Evaluation
Kuo Chen, Zhong Qu, Shufang Xia
Chongqing University of Posts and Telecommunications, China

IP-20PM-1-3 14:00

Holographic Particle Sizing by Using Wigner-Ville Distribution of Flipped and Replicated Holograms
Porntip Chuamchaitrakool[1], Joewono Widjaja[1], Hiroyuki Yoshimura[2]
[1]Suranaree University of Technology, Thailand,
[2]Chiba University, Japan

IP-20PM-1-4 14:15

Multi-Layered Aerial LED Display by Double-Stage Polarized Aerial Imaging by Retro-Reflection
Nao Kurokawa, Kenta Onuki, Hirotsugu Yamamoto
Utsunomiya University, Japan

IP-20PM-1-5 14:30

Highly Concentration Phenanthrenequinone Doped Poly (MMA-Co-BzMA) for Thick Polarization Holography
Fenglan Fan, Ying Liu, Yifan Hong, Jinliang Zang, Tianbo Zhao, Xiaodi Tan
Beijing Institute of Technology, China

IP-20PM-1-6 14:45

Full-Color Polygon Based Computer Holography for Real Objects Captured by a Depth Camera
Yu Zhao[1], Ki-Chul Kwon[1], Yan-ling Piao[1], Seok-Hee Jeon[2], Nam Kim[1]
[1]Chungbuk National University, Republic of Korea,
[2]Incheon National University, Republic of Korea

----- 15:00-15:30 BREAK -----

Oral, Thursday, April 20 PM

LDC <Room 301>

[LDCp3] 13:00-15:00
<Exhibition Hall A>
Poster session program p.XX

LEDIA <Room 411+412>

[LEDp2] 13:15-15:15
Poster Session
<Exhibition Hall A>
Poster session program p.XX

[LED3] 15:15-17:45
Light Emitting Diodes-1
Chairs: Yongjo Park
Seoul National University, Korea
Yoshio Honda
Nagoya University, Japan

LED3-1 15:15 *Invited*

Status and Prospects for Wide Bandgap LEDs / Lasers and Their Applications
Michael Krames
ARKESSO, LLC, USA

LED3-2 15:45

Influence of Textured Surface on Performance and Reliability of InGaN LEDs
Wen-Chu Yang[1], Bai-Hao Lai[1], Hui-Tzu Chang[1], Fang-Ming Chen[1], Jenn-Chyuan Fan[2], Ray-Ming Yang[3], Chia-Hung Sun[3]
[1]Institute of Photonics, National Changhua University of Education, Taiwan, [2]Department of Electronic Engineering, Nan Kai University of Technology, Taiwan, [3]Tekcore Inc., Taiwan

LED3-3 16:00

Structural Design and Characterization of GaN-Based Tunnel-Junction Light-Emitting Diodes
Jih-Yuan Chang[1], Ya-Hsuan Shih[2], Fang-Ming Chen[1], Yen-Kuang Kuo[1]
[1]National Changhua University of Education, Taiwan, [2]National Cheng Kung University, Taiwan

LED3-4 16:15

Integration of GaN LEDs with Si CMOS integrated circuits on 200 mm Si
Li Zhang[1], Kwang Hong Lee[1], I. Made Riko[1], Kenneth Lee[1], Soo Jin Chua[2], Eugene Fitzgerald[3]
[1]Singapore-MIT Alliance for Research and Technology, Singapore, [2]National University of Singapore, Singapore, [3]Massachusetts Institute of Technology, USA

----- 16:30-16:45 Break -----

LNPC <Room 317>

[LNPC4] 14:00-16:15
Vacuum birefingence
Chair: A. Di Piazza
MPI, Germany

LNPC4-1 14:00 *Invited*

A fresh look on the Heisenberg-Euler effective action
F. Karbstein
HI Jena, Germany

LNPC4-2 14:30 *Invited*

Vacuum birefringence in high-energy laser-electron collisions
B. King[1], N. Elkina[2]
[1]Plymouth Univ., UK, [2]HI Jena, Germany

LNPC4-3 15:20

High-energy vacuum birefringence in an intense laser field
S. Bragin, S. Meuren, C. H. Keitel, A. Di Piazza
MPI, Germany

LNPC4-4 16:45 *Invited*

The possibility of observing resonant photon splitting and photon scattering in a strong electromagnetic field
A. Hartin
DESY, Germany

Oral, Thursday, April 20 PM

LSSE <Room 316>

[LSSE5] 13:30-15:00
Space High Intensity Laser
Chair: Toshikazu Ebisuzaki
Computational Astrophysics Laboratory, RIKEN, Japan

LSSE5-1 13:30 *Invited*

A XCAN Laser for Small Space-Debris Mitigation
Gérard Mourou, Jean Christophe Chanteloup
Ecole Polytechnique, France

LSSE5-2 14:00 *Invited*

Advanced Solid-state Lasers for Space - A Perspective on the Prospects of Spaceborne Lasers
John-Mark Hopkins
Fraunhofer UK, UK

LSSE5-3 14:30 *Invited*

Prospective laser system architectures for space debris removal
Alexander Sergeev, Ivan Mukhin, Ivan Kuznetsov, Oleg Palashov
Institute of Applied Physics of Russian Academy of Sciences, Russia

OMC <Room 418>

[OMC3] 13:30-15:00
Optical Manipulation III
Chair: Yoshihiko Arita
Univ. of St. Andrews, UK

OMC3-1 13:30 *Invited*

Light robotics: aiming towards all-optical nano-robotics
Jesper Glückstad
Technical Univ. of Denmark, Denmark

OMC3-2 14:00

Tailored vectorial light fields: flower, spider web and hybrid structures
Eileen Otte, Christina Alpmann, Cornelia Denz
Westfälische Wilhelms-Univ. Münster, Germany

OMC3-3 14:15

High average power ultraviolet picosecond optical vortex generation
Yuta Sasaki, Maya Kowa, Koki Yamaguchi, Jun Shibakawa, Katsuhiko Miyamoto, Takashige Omatsu
Chiba Univ., Japan

OMC3-4 14:30

Generation of intense ultrafast-rotating ring-shaped optical lattices with programmable control of rotational symmetry
Keisaku Yamane, Kohei Iwasa, Kohei Kakizawa, Kazuhiko Oka, Yasunori Toda, Ryuji Morita,
Hokkaido Univ., Japan

OMC3-5 14:45

Astigmatism inducing the degenerate effect in nearly hemispherical cavities: generation of three-dimensional structured light
Jung-Chen Tung[1], Hsing-Chih Liang[2], Kuan-Wei Su[1], Kai-Feng Huang[1], Yung-Fu Chen[1]
[1]National Chiao Tung University, Taiwan, [2]National Taiwan Ocean University, Taiwan

----- 15:00-15:30 Coffee Break -----

XOPT <Room 313+314>

[XOPT3] 13:30-15:00
Optical components & systems (I)
Chair: H. Yumoto
JASRI

XOPT3-1 13:30 *Invited*

X-ray in-line interferometers based on refractive optics
Anatoly Snigirev
Baltic Federal University, Russia

XOPT3-2 14:00

Development of soft x-ray focusing system with ellipsoidal mirror
Yoko Takeo[1], Hiroto Motoyama[1], Yasunori Senba[2], Hikaru Kishimoto[2], Haruhiko Ohashi[2], Hidekazu Mimura[1]
[1]The University of Tokyo, Japan, [2]JASRI, Japan

XOPT3-3 14:15

Advances in Axially Symmetric Microfocus and Nanofocus Xrays
Wenbing Yun, Benjamin Stripe, Mark Cordier, Janos Kirz, Richard Ian Spink, Sylvia Lewis Sigray, USA

XOPT3-4 14:30

Design and Test of a Miniature Dynamic Mirror Bender with Laminar Flexure Bending Machanism for X-ray Microfocusing
Deming Shu[1], Aiguo Li[2], Steven Kearney[1], Chengwen Mao[2], Jayson Anton[1], Yaolin Pan[2]
[1]Argonne National Laboratory, USA, [2]Shanghai Institute of Applied Physics, China

XOPT3-5 14:45

The ALS ex situ metrology for x-ray optics: current capabilities, new challenges, and tasks for further developments
Valeriy Yashchuk, Gevork Gevorkyan, Ian Lacey, Sergey Nikitin
Advanced Light Source, Lawrence Berkeley National Laboratory, USA

----- 15:00-15:30 Break -----

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ALPS

BICS <Room 419>

[BICS6] 15:20-18:00
Beyond the Disturbance: High-Resolution Imaging Through Turbid Living Cells and Tissues
Chairs: Yosuke Tamada
National Institute for Basic Biology, Japan
Hideki Takami
National Astronomical Observatory of Japan, Japan

Opening Remarks 15:20-15:25
Yosuke Tamada
National Institute for Basic Biology, Japan

BICS6-1 15:25 *Invited*

Adaptive optical microscope for brain imaging in vivo
Kai Wang
Insitute of Neuroscience, Chinese Academy of Sciences, China

BICS6-2 16:05 *Invited*

Current limitations in super-resolution fluorescence microscopy for biological specimens: how deep can we go from the coverglass?
Yasushi Okada[1,2]
[1]RIKEN Quantitative Biology Ctr., Japan, [2]The Univ. of Tokyo, Japan

BICS6-3 16:35 *Invited*

Computational holographic imaging through random diffraction
Ryoichi Horisaki
Osaka Univ., Japan

BICS6-4 16:55 *Invited*

Adaptive optical imaging through complex living plant cells
Yosuke Tamada[1], Yutaka Hayano[2], Shin Oya[2], Noriaki Miura[3], Yasuhiro Kamei[1], Masayuki Hattori[1]
[1]National Institute for Basic Biology, Japan, [2]National Astronomical Observatory of Japan, Japan, [3]Kitami Institute of Technology, Japan

BICS6-5 17:15 *Invited*

Ultra-fast 3D scanning and holographic illumination in non-linear microscopy using acousto-optic deflectors
Laurent Bourdieu, Walther Akemann, Cathie Ventalon, Jean-Francois Léger, Stéphane Dieudonné, Baptiste Blochet, Benjamin Mathieu, Sylvain Gigan
Ecole Normale Supérieure, France

Closing Remarks 17:55-18:00
Hideki Takami
National Astronomical Observatory of Japan, Japan

CLES / LANSA <Room 416+417>

[PHS] 16:00-XX:XX
XXXXX
Chair: XXXXX
XXXXX

PHS-1 16:00 *Invited*

Status of fast ignition researches in china
Feng Zhang, Yuqiu Gu, Baohan Zhang
Science and Technology on Plasma Physics Laboratory,Laser Fusion Research Center, CAEP , China

PHS-2 16:40

Measurement of proton and D+ stopping in plasma
Zhe Zhang[1], Yihang Zhang[1], Jie Feng[1], Lei Zhao[2], Fang Tan[3], Yuichi Wu[3], Yuqiu Gu[3], Yutong Li[1]
[1]Institute of Physics, CAS, China, [2]Department of Physics, University of Mining and Technology of China, China, [3]National Key Laboratory of Laser Fusion, China

PHS-3 17:00

Effect of external and self-generated magnetic field in formation of pre-plasma due to the pre-pulse of ultra-intense laser
Hideo Nagatomo[1], Takashi Asahina[1], Atsushi Sunahara[2], Kunioki Mima[3], Ryohei Hanayama[3]
[1]Institute of Laser Engineering, Osaka University, Japan, [2]Institute for Laser Technology, Japan, [3]The Graduate School for the Creation of New Photonics Industries, Japan

PHS-4 17:20

Colliding shock Ion acceleration by multi laser beam irradiation
Kunioki Mima[1], T. Asahina[2], A. Yogo[2], T. Johzaki[3], H. Nagatomo[2], T. Taguchi[4], Y. Sentoku[2], R. Hanayama[1], H. Nishimura[2]
[1]The Graduate School for the creation of New Photonics, Japan, [2]Institute of laser engineering, Osaka University, Japan, [3]School of Engineering, Hiroshima University, Japan, [4]Faculty of Engineering, Setsunan University, Japan

PHS-5 17:40

The kinetic neutron production in indirect-drive fast ignition experiment
Lianqiang Shan[1], Hongbo Cai[2], Wenshuai Zhang[3], Weimin Zhou[1], Shaoping Zhu[2], Yuqiu Gu[1]
[1]Science and Technology on Plasma Physics Laboratory,Laser Fusion Research Center, CAEP , China, [2]Institute of Applied Physics and Computational Mathematics, China, [3]Graduate School, China Academy of Engineering Physics, China

Oral, Thursday, April 20 PM

HEDS <Room 311+312>

[HEDS8] 15:15-16:15
High-Field Physics / Rad. Source
Chair: K. Sueda
Osaka Univ., Japan

HEDS8-1 15:15 *Invited*

Measuring lifespan of hot, relativistic electrons produced in ultra-intense laser-solid interactions
G Ravindra Kumar
TaTa Inst., India

HEDS8-2 15:45 *Invited*

High energy & high average power Pump Lasers… The route to High average power petawatt lasers
Franck Falcoz
Amplitude Tech., Frrance

----- 16:15-16:30 Break -----

[HEDS9] 16:30-17:30
Business / Products
Chair: J. Sasaki
Japan Laser, Japan

HEDS9-1 16:30 *Invited*

Innovative Targetry for Laser-Plasma Interaction
F. Sylla
Source Lab., France

HEDS9-2 17:00 *Invited/Special*

Electron beam technology innovation by semiconductor photocathodes and its commercialization for startup
Tomohiro Nishitani[1,2], Takayuki Suzuki[2]
[1]Nagoya Univ., Japan, [2]Photo electron Soul, Japan

ICNN <Room 414+415>

[ICNN5] 15:00-17:00
Plasmonic nanostructures
Chair: XXXXX
XXXXX

ICNN5-1 15:00 *Invited*

Plasmon Enhanced Single-Molecule Electroluminescence and Beyond
Zhenchao Dong
University of Science and Technology of China, P. R. China

ICNN5-2 15:30

Carrier-lifetime measurements of deep-subwavelength Si core plasmonic waveguide
Hidetaka Nishi, Tai Tsuchizawa, Masaaki Ono, Masaya Notomi, Shinji Matsuo
NTT, Japan

ICNN5-3 15:45

Luminescent Silicon Nanocrystals: Physics and Applications
Ilya Sychugov[1], Federico Pevere[1], Jun-Wei Luo[2], Jonathan Veinot[3], Alex Zunger[4], Jan Linnros[1]
[1]KTH - Royal Institute of Technology, Sweden, [2]State Key Laboratory for Superlattices and Microstructures, Chinese Academy of Science, China, [3]University of Alberta, Edmonton, Canada, [4]Renewable and Sustainable Energy Institute, University of Colorado, USA

ICNN5-4 16:00

Surface plasmon-enhanced ultraviolet electroluminescence from an individual n-ZnO microrod/p-GaN heterostructured light-emitting diodes via controlling the size of Ag nanoparticles
Hsu-Cheng Hsu, Dai-Jie Lin, Ching-Yen Wang, Bo-Lun Jiang
Department of Photonics, National Cheng Kung University, Tainan, Taiwan

ICNN5-5 16:15

Complex cavity photonic crystal surface emitting laser
Yufei Wang, Xiaojie Guo, Wanhua Zheng
Laboratory of Solid State Optoelectronics Information Technology, Institute of Semiconductors, CAS, China

ICNN5-6 16:30

A Single GaAs Nanowire Schottky Junction Photodetector
Yanbin Luo, Bang Li, Xin Yan, Qichao Lu, Jiamin Wang, Xia Zhang
State Key Laboratory of Information Photonics and Optical Communications, Beijing University of Posts and Telecommunications, China

ICNN5-7 16:45

Silicon photonics platform and PDK of 300mm SOI for advanced optical integrated circuits
Tohru Mogami[1], Tsuyoshi Horikawa[1,2], Keizo Kinoshita[1]
[1]Photonics Electronics Technology Research Association (PETRA), Japan, [2]National Institute of Advanced Industrial Science and Technology (AIST), Japan

IP <Room 413>

[IP-20PM-2] 15:30-18:00
[Special Session] Computational complex-amptude imaging
Chair: XXXXX
XXXXX

IP-20PM-2-1 15:30 *Invited*

Quantitative Single-Shot Phase Imaging for Phase Inspection
Mikael Sjödahl[1], Per Bergström[1], Davood Khodadad[2], Per Gren[1], Eynas Amer[1], Erik Olsson[1]
[1]Luleå University of Technology, Sweden, [2]Linnaeus University, Sweden

IP-20PM-2-2 16:00 *Invited*

Three-Dimensional Pupil Holographic Imaging
Yuan Luo
National Taiwan University, Taiwan

IP-20PM-2-3 16:30 *Invited*

A Single Pixel Imaging for Digital Holography
Min-Chul Park, Thibault Leportier
Korea Institute of Science and Technology, Republic of Korea

IP-20PM-2-4 17:00 *Invited*

High-Speed Single-Pixel Digital Holography with Phase-Structured Illumination
Lluís Martínez-León[1], Humberto González[1], Pere Clemente[2], Fernando Soldevila[1], Eva Salvador-Balaguer[1], María Araiza-Esquivel[1], Jesús Lancis[1], Enrique Tajahuerce[1]
[1]Universitat Jaume I, Spain, [2]Universidad de Zacatecas, México

IP-20PM-2-5 17:30 *Invited*

Cyphertext-Only Attack to Double Random-Phase Encoding: Experimental Demonstrations
Guohai Situ, Guowei Li, Wanqin Yang, Dayan Li
Shanghai Institute of Optics and Fine Mechanics, China, University of the Chinese Academy of Sciences, China

Oral, Thursday, April 20 PM

LDC <Room 301>

[LDC4]15:30-17:00
Laser Diode & LED
Co Chairs: Tomoyuki Miyamoto
Tokyo Inst. Tech., Japan
Charles Li
PlayNitride Inc., Taiwan

LDC4-1 15:30 *Invited*

GaN-based VCSELs towards high efficiency
T. Takeuchi[1], S. Kamiyama[1], M. Iwaya[1], I. Akasaki[1,2]
[1]Meijo Univ.,Japan, [2]Nagoya Univ., Japan

LDC4-2 16:00

High-Power and Highly-Reliable 638 nm Band BA-LD for CW Operation
T. Nishida, K. Kuramoto, S. Abe, M. Kusunoki, M. Miyashita, T. Yagi
Mitsubishi Electric Corp., Japan

LDC4-3 16:15

Master Oscillator Power Amplifier Concepts with Nearly Diffraction-Limited Watt-Level Continuous Wave Emission at 635 nm for Laser Projection
N. Werner, G. Blume, D. Feise, J. Pohl, P. Ressel, D. Prasai, K. Paschke, G. Tränkle
Ferdinand-Braun-Institut, Leibniz-Institut für Höchstfrequenztechnik, Germany

LDC4-4 16:30

Improvement of WPE of Laser Diode by Conversion of Spontaneous Surface-emission to Edge-emission via Radiation Mode
Junichi Kinoshita
Osaka Univ., Japan

LDC4-5 16:45

Study on AlGaN-Based High-Voltage Ultraviolet Light-Emitting Diodes for White Light Applications
Ray-Hua Horng, Chen-Hao Kuo, Ching-Ho Tien, Dong-Sing Wuu
National Chiao Tung Univ., Taiwan

LEDIA <Room 411+412>

[LED4] 16:45-17:45
Light Emitting Diodes-2
Chairs: Michael Krames
ARKESSO, LLC, USA
Motoaki Iwaya
Meijo University, Japan

LED4-1 16:45 *Invited*

Growth and Optical Characteristics of GaN-based LED on Cavity-Engineered Sapphire Substrate
Yongjo Park
Seoul National University, Korea

LED4-2 17:15

Temperature Dependence of Efficiency in IIInitride Light-emitting Diodes
S. Oh[1], J. Cho[1], E. F. Schubert[2]
[1]Chonbuk National University, Republic of Korea, [2]Rensselaer Polytechnic Institute, USA

LED4-3 17:30

Semipolar (10-1-1) GaInN/GaN p-i-n light-emitting solar cells
Noboru Muramatsu[1], Tutomu Takanishi[1], Shun Mitsuhuji[1], Motoaki Iwaya[1], Tetsuya Takeuchi[1], Satoshi Kamiyama[1], Isamu Akasaki[2]
[1]Department of Materials Science and Engineering, Meijo University, Japan, [2]Department of Materials Science and Engineering, Meijo University, Akasaki Research Center, Nagoya University, Japan

LNPC <Room 317>

[LNPC5] 16:15-17:45
Laser-driven fundamental physics and technology
Chair: K Homma[1,2]
[1]Hiroshima Univ., Japan, [2]IZEST, Ecole Polytechnique, France

LNPC5-1 16:15 *Invited*

Terahetz Photon Detectors
Y. Kawano
TITEC, Japan

LNPC5-2 16:45 *Invited*

Neutrino spectroscopy with atoms and laser - toward detection of relic neutrino -
A. Yoshimi
RIIS, Okayama Univ., Japan

LNPC5-3 17:15

Optical Cavity Tests of Lorentz Invariance
Y. Michimura[1], T. Takeda[1], Y. Sakai[1], N. Matsumoto[2,3,4], M. Ando[1,5]
[1]The univ. of Tokyo, Japan, [2]FRIS, Tohoku Univ., Japan, [3]RIEC, Tohoku Univ., Japan, [4]JST, PRESTO, Japan, [5]NAOJ, Japan

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LSSE <Room 316>

OMC <Room 418>

[OMC4] 15:30-17:45
Optical Manipulation IV
Chair: Kei Murakoshi
Hokkaido Univ., Japan

OMC4-1 15:30 *Invited*

To be announced
Shuntaro Tani
The Univ. of Tokyo, Japan

OMC4-2 16:00

Plasmonic Au nano-needle fabricated by optical vortex laser illumination
Kai Izumisawa[1], Tatsuyuki Sugimoto[1], Yuri Nakamura[1], Katsuhiko Miyamoto[1], Tsukasa Torimoto[2], Ryuji Morita[3], Takashige Omatsu[1]
[1]Chiba Univ., Japan, [2]Nagoya Univ., Japan, [3]Hokkaido Univ., Japan

OMC4-3 16:15

Macroscopic assembly by optical control of zmol-level DNA hybridization
Takuya Iida[1], Mamoru Tamura[1], Syoji Ito[2]
[1]Osaka Prefecture Univ., Japan, [2]Osaka University, Japan

OMC4-4 16:30

Twisted polymeric microfiber formed by structured light illumination
Junhyung Lee[1], Shunsuke Toyoshima[1], Katsuhiko Miyamoto[1,2], Yoshihiko Arita[2,3], Kishan Dholakia[3], Takashige Omatsu[1,2]
[1]Graduate School of Advanced Integration Science, Chiba Univ., Japan, [2]Molecular Chirality Research Ctr., Chiba Univ., Japan, [3]Univ. of St. Andrews, UK

OMC4-5 16:45

Plasmon active site for nanosized polymerization
Hiro Minamimoto, Jinjiang Zhang, Xiaowei Li, Kei Murakoshi
Hokkaido Univ., Japan

OMC4-6 17:00

Circularly polarized lights twist azo-polymer to form helical surface relief
Keigo Masuda[1], Shogo Nakano[1], Daisuke Barada[2], Katsuhiko Miyamoto[1], Takashige Omatsu[3,4]
[1]Chiba Univ., Japan, [2]Utsunomiya Univ., Japan, [3]Graduate School of Advanced Integration Science, Chiba Univ., Japan, [4]Molecular Chirality Research Ctr., Chiba Univ., Japan

OMC4-7 17:15

Fabrication of semiconductor microspheres with laser ablation in superfluid helium
Yosuke Minowa, Yuya Oguni, Masaaki Ashida
Osaka Univ., Japan

OMC4-8 17:30

Creating a crystalline silicon (111) needle by optical vortex illumination
Kai Izumisawa[1], Ablimit Ablez[1], Yuri Nakamura[1], Tatsuyuki Sugimoto[1], Hanami Fujita[1], Katsuhiko Miyamoto[1], Ryuji Morita[2], Takashige Omatsu[1]
[1]Chiba Univ., Japan, [2]Hokkaido Univ., Japan

XOPT <Room 313+314>

[XOPT4] 15:30-18:00
Inelastic scattering & spectroscopy
Chair: M. Yabashi
RIKEN SPring-8 Center

XOPT4-1 15:30 *Invited*

Optics and Optical Issues for IXS
Alfred Q.R. Baron
RIKEN SPring-8 Center, Japan

XOPT4-2 16:00 *Invited*

Inelastic x-ray scattering and new frontiers in x-ray optics
Hasan Yavans
DESY, Germany

XOPT4-3 16:30 *Invited*

Flat-Crystal Optics for Ultra-High Energy-Resolution Resonant Inelastic X-ray Scattering
Thomas Gog, Jung Ho Kim, Diego M. Casa, Mary H. Upton, Ayman Said, XianRong Huang
Argonne National Laboratory, USA

XOPT4-4 17:00

X-ray Echo Spectroscopy
Yuri Shvyd'ko
Advanced Photon Source, Argonne National Laboratory, USA

XOPT4-5 17:15 *Invited*

2-Dimensional VLS Gratings for X-ray Spectroscopy and Monochromators with Femtosecond Time Resolution
Alexei Erko
Helmholtz Zentrum Berlin, Deutschland

XOPT4-6 17:45

An improved multi-channel multilayer-mirrors-based EUV/soft X-ray spectrometer developed for the dynamic hohlraum experiment
Qiang Yi[1], Yi Qin[1], Rongkun Xu[1], Taiping Peng[1], Qiushi Huang[2], Zhanshan Wang[2]
[1]INPC, CAEP, China, [2]Tongji University, China

----- 19:00-21:00 XOPT Banquet -----

Thu, 20 April, PM

Oral, Friday, April 21 AM

ALPS <Room 511+512>

[ALPS15] 9:00-10:30
Terahertz Technology 1
Chair: Jinghua Teng
Inst. of Materials Res. and Eng. Singapore

ALPS15-1 9:00 *Invited*

Development and Application of Terahertz Focal-Plane Imaging Technique

Xinke Wang, Yan Zhang
Dep. of Phys., Capital Normal Univ., Beijing Key Lab. of Metamaterials and Devices, and Key Lab. of Terahertz Optoelectronics, Ministry of Edu., China

ALPS15-2 9:30

Carrier-Envelope Phase-Stable KTA-Based Optical Parametric Amplifiers at 3.3 μm

F. M. Lu, T. Kanai, Y. Matsumoto, N. Ishii, and J. Itatani
The inst. for Solid State Phys., The Univ. of Tokyo, Japan

ALPS15-3 9:45

Terahertz radiation from two-color laser filaments in air

Y. Chen[1,2], Z. Zhang[1,2], M. Chen[1,2], Z. Zhang[1,2], J. Yu[1], Z. Sheng[1,2,3], and J. Zhang[1,2]
[1]Dep. Phys. and Astro., Shanghai Jiao Tong Univ., China, [2]Collaborative Innovation Center of IFSA, Shanghai Jiao Tong Univ., China, [3]Dep. Phys., SUPA, Univ. of Strathclyde, UK

ALPS15-4 10:00

Enhanced Terahertz Emission from Micro Structure Fabricated from Silver Nanoparticles

K. N. T. Phan, K. Kato, K. Takano, M. Yoshimura, H. Azechi, and M. Nakajima
ILE, Osaka Univ., Japan

ALPS15-5 10:15

Effects of Metal V grooved waveguide gap width on MLD THz-TDS system using laser chaos and super focusing

F. Kuwashima[1], T. Shirao[1], T. Kishibata[1], Y. Akamine[1], K. Iwao[1], M. Ooi[1], N. Sakaue[1], S. Gouda[1], T. Sirasaki[1], M. Tani[2], K. Kurihara[3], K. Yamamoto[2], O. Morikawa[4], H. Kitahara[2], and M. Nakajima[5]
[1]Dep. of Elec. and Elec. Eng., Fukui Univ. of Tech., Japan, [2]Res. Cent. for Dev. of Far-Infrared Reg., Univ. of Fukui, Japan, [3]Fac. of Edu., Univ. of Fukui, Japan, [4]Chair of Liberal Arts, Japan Coast Guard Academy, Japan, [5]ILE., Osaka Univ., Japan

----- 10:30-11:00 Break ----

BICS <Room 419>

[BICS7] 9:00-12:00
Interdisciplinary Biomedical Imaging
Chair: Tatsuki Tahara
Kansai Univ., Japan

BICS7-1 9:00 *Invited*

High-speed bioimaging with frequency-division-multiplexed fluorescence confocal microscopy

Hideharu Mikami, Jeffrey Harmon, Yasuyuki Ozeki, Keisuke Goda
The Univ. of Tokyo, Japan

BICS7-2 9:30 *Invited*

Observation of elastic wave propagation near tissue surface using swept-source optical coherence tomography

Marie Tabaru
Tokyo Institute of Technology, Japan

BICS7-3 10:00 *Invited*

Non-label bioimaging utilizing scattering lights

Tomonobu M. Watanabe[1], Taro Ichimura[1], Hideaki Fujita[2]
[1]RIKEN Quantitative Biology Ctr., Japan, [2]Osaka Univ., Japan

----- 10:30-11:00 Coffee Break -----

CLES / LANSA <Room 416+417>

[ND2] 9:00-XX:XX
XXXXX
Chair: XXXXX
XXXXX

ND2-1 9:00 *Invited*

Diagnosing collisionless and kinetic phenomena via neutron self-emission on the National Ignition Facility

Drew Higginson[1], J. S. Ross[1], R. Hatarik[1], A. Link[1], D. D. Ryutov[1], S. V. Weber[1], S. C. Wilks[1], F. Fiuza[2], C. K. Li[3], H. Sio[3], A. B. Zylstra[4], H.-S. Park[1]
[1]Lawrence Livermore National Laboratory, USA, [2]SLAC National Accelerator Laboratory, USA, [3]Massachusetts Institute of Technology, USA, [4]Los Alamos National Laboratory, USA

ND2-2 9:40

Measurements of neutrons from photonuclear reaction using laser compton scattering gamma-ray

Shuji Miyamoto[1], Akinori Takemoto[2], Masashi Yamaguchi[2], Kento Sugita[2], Satoshi Hashimoto[2], Sho Amano[2], Takehito Hayakawa[3], Toshiyuki Shizuma[3], Hiroki Utsunomiya[4], Toshiro Itoga[5], Yoshihiro Asano[6]
[1]University of Hyogo, Japan, [2]Laboratory of Advanced Science and Technology for Industry, University of Hyogo, Japan, [3]National Institutes for Quantum and Radiological Science and Technology, Japan, [4]Konan University, Japan, [5]Japan Synchrotron Radiation Research Institute, Japan, [6]RIKEN SPring-8 Center, Japan

ND2-3 10:00

Laser-based fast-neutron spectroscopy

Ishay Pomerantz[1], I. Kishon[2,3], A. Kleinschmidt[4,5], V. A. Schanz[4,5], A. Tebartz[4], J. Fernandez[6], D. Gautier[6], R. P. Johnson[6], T. Shimada[6], G. A. Wurden[6], M. Roth[4]
[1]Tel Aviv University, Israel, [2]The School of Physics and Astronomy, Tel-Aviv University, Israel, [3]Center for Light-Matter Interaction, Tel-Aviv University, Israel, [4]Institut für Kernphysik, Technische Universität Darmstadt, Israel, [5]GSI Helmholtzzentrum für Schwerionenforschung GmbH, Israel, [6]Los Alamos National Laboratory, Israel

Oral, Friday, April 21 AM

HEDS <Room 311+312>

[HEDS10] 9:00-10:30
Beams (ImPACT Session VI)
Chair: M. Kando
QST, Japan

HEDS10-1 9:00 *Invited*

Relativistic electron beams driven by single-cycle laser pulses at kilohertz repetition rate
Jerome Faure
LOA, France

HEDS10-2 9:30 *Invited*

Dynamics of plasma mirrors driven by relativistic-intensity few-cycle pulses
Rodrigo Lopez-Martens
LOA, France

HEDS10-3 10:00 *Invited*

TBD
Mitsuhiro Yoshida
KEK, Japan

----- 10:30-10:50 Break -----

ICNN <Room 414+415>

[ICNN6] 9:00-10:30
Nanowires and optoelectronics
Chair: XXXXX
XXXXX

ICNN6-1 9:00 *Invited*

Heterostructured III-V nanowires: opportunities and challenges
Vladimir Dubrovskii
St. Petersburg Academic University, Russia

ICNN6-2 9:30

Nanowire-quantum dot lasers on flexible substrates
Jun Tatebayashi[1], Yasutomo Ota[1], Satomi Ishida[2], Masao Nishioka[2], Satoshi Iwamoto[3], Yasuhiko Arakawa[3]
[1]NanoQuine, the Univ. of Tokyo, Japan, [2]IIS, the Univ. of Tokyo, Japan, [3]NanoQuine and IIS, the Univ. of Tokyo, Japan

ICNN6-3 9:45

A theoretical comparison study on threshold currents of III-nitride lasers with quantum dots and quantum wells
Renchun Tao[1], Yasuhiko Arakawa[2]
[1]Institute for Nano Quantum Information Electronics, The University of Tokyo, Japan, [2]Institute of Industrial Science, The University of Tokyo, Japan

ICNN6-4 10:00

Photonic Crystal Nanolaser Array with Ordered Lasing Wavelengths For High-Speed Cell Imaging
Hiroshi Abe, Satoshi Ota, Yasushi Takemura, Toshihiko Baba
Yokohama National University, Japan

ICNN6-5 10:15

Spectral control of near-field thermal radiation transfer using a Si photonic crystal thermal emitter
Takuya Inoue, Takashi Asano, Susumu Noda
Kyoto University, Japan

----- 10:30-11:00 Break -----

IP <Room 413>

[IP-21AM-1] 9:00-10:30
[Special Session] Holography
Chair: XXXXX
XXXXX

IP-21AM-1-1 9:00 *Invited*

Recent Progress in Optical Scanning Holography
Jung-Ping Liu
Feng Chia University, Taiwan

IP-21AM-1-2 9:30 *Invited*

Applications of Geometric Metasurface in Holography
Lingling huang, Yongtian Wang
Beijing Institute of Technology, China

IP-21AM-1-3 10:00 *Invited*

Holographic and Light Field Head Mounted Displays and Their Contents Synthesis
Jae-Hyeung Park
Inha University, Republic of Korea

------ 10:30-11:00 BREAK ------

Oral, Friday, April 21 AM

LDC <Room 301>

[LDC5] 9:00-10:30
Color Speckle & Management
Co Chairs: Shigeo Kubota
Oxide Corp., Japan
Young-Joo Kim
Yonsei Univ., Korea

LDC5-1 9:00 *Invited*

Direct Measurement of Color Speckle II Modification of 2D Colorimeter
Kazuo Kuroda[1], Junichi Kinoshita[2], Hiroyuki Tanaka[3], Ryushi Fujimura[1], Kazuhisa Yamamoto[2]
[1]Utsunomiya Univ., Japan, [2]Osaka Univ., Japan, [3]Topcon Technohouse, Japan

LDC5-2 9:30

Color Speckle Measurement Errors for Uncorrelated XYZ Filter-Sensor System
Junichi Kinoshita[1] , Kazuhisa Yamamoto[1], Kazuo Kuroda[2]
[1]Osaka Univ., Japan, [2]Utsunomiya Univ., Japan

LDC5-3 9:45

Measurement of Angular Characteristics of Speckle Contrast
Shogo Kubota, Makio Kurashige, Kazutoshi Ishida
Dai Nippon Printing Co., Ltd., Japan

LDC5-4 10:00

A New Measurement Method Suitable for Color and Photometric Quantity of Laser Displays
K.Hieda, T.Maruyama
HIOKI E.E. CORP., Japan

LDC5-5 10:15

Efforts to Realize Wide Color Gamut, High Brightness Projector
Masaya Masuda, Daisuke Hayashi, Shunji Kamijima
Seiko Epson Corp., Japan

LEDIA <Room 411+412>

[LED5] 9:00-10:30
Growths
Chairs: Yoshinao Kumagai
Tokyo University of Agriculture and Technology, Japan
Takeo Kageyama
The University of Tokyo, Japan

LED5-1 9:00 *Invited*

Growth and Characterization of $(Al,Ga)_2O_3$-Based Alloy and Heterostructures
Takayoshi Oshima
Saga University, Japan

LED5-2 9:30 *Invited*

HVPE as a method for crystallizing GaN with low background impurity concentration with controllable doping - highly conductive n-type and semi-insulating material
Malgorzata Iwinska, Michal Bockowski
Institute of High Pressure Physics PAS, Poland

LED5-3 10:00

Novel doping techniques during MOVPE of GaN
Christoph Berger, Andreas Lesnik, Silvio Neugebauer, Armin Dadgar, Marc Hoffmann, Aqdas Fariza, Florian Hörich, Jürgen Bläsing, Hartmut Witte, Peter Veit, Jürgen Christen, André Strittmatter
Otto-von-Guericke-University Magdeburg, Germany

LED5-4 10:15

Effect of gaseous carbon addition in GaN crystal growth by Na-flux method
Naoki Takeda, Masayuki Imanishi, Kousuke Murakami, Masatoshi Hayashi, Mamoru Imade, Masashi Yoshimura, Yusuke Mori
Osaka University, Japan

LNPC <Room 317>

[LNPC6] 09:00-11:45
Physics with combined light sources
Chairs: K. Homma[1,2]
[1]Hiroshima Univ., Japan, [2]IZEST, Ecole Polytechnique, France

LNPC6-1 09:00

Search for Hidden Photon Dark Matter (HPDM) using Dish Antenna in Millimeter-wave region
Y. Okesaku[1], Y. Yamazaki[2], T. Inada[2], S. Asai[1], S. Knirck[1,3], T. Idehara[4]
[1]The univ. of Tokyo, Japan, [2]ICEPP, The univ. of Tokyo, Japan, [3]Univ. of Heidelberg, Germany, [4]Univ. of Fukui, Japan

LNPC6-2 09:20

Search for X-ray photon-photon elastic scattering with a Laue-case beam collider
T. Namba[1], T. Yamaji[2], T. Inada[1], T. Yamazaki[1], S. Asai[2], T. Kobayashi[3], K. Tamasaku[4], T. Tanaka[5], Y. Inubushi[6], K. Sawada[4], M. Yabashi[4], T. Ishikawa[4]
[1]ICEPP, The univ. of Tokyo, Japan, [2]The univ. of Tokyo, Japan, [3]KEK, Japan, [4]RIKEN, SPring-8, Japan, [5]Univ. of Hyogo, Japan, [6]JASRI, Japan

LNPC6-3 09:40

Possiblity for measuring Delbrück Scattering in the sub-MeV range using polarized gamma-ray photons
J. K. Koga, T. Hayakawa
QST, Japan

LNPC6-4 10:05

Phase retardation and polarimetry with GeV photons to probe deformed vacuum
Y. Nakamiya
Y. Nakamiya[1], K. Homma[2,3]
[1]ICR, Kyoto Univ., Japan, [2]Hiroshima Univ., Japan, [3]IZEST, Ecole Polytechnique, France

----- 10:30-10:45 Break -----

Oral, Friday, April 21 AM

LSSE <Room 302>

[LSSE6] 9:30-14:10
Natural Energy Production
Chair: Satoshi Wada
RIKEN Center for Advanced Photonics, Japan

LSSE6-1 9:30 *Invited*

Photocatalysis and Light Guide Pipe
Akira Fujishima
Tokyo University of Science, Japan

OMC <Room 418>

[OMC5] 9:00-10:30
Optical Manipulation V
Chair: Masaaki Ashida
Osaka Univ., Japan

OMC5-1 9:00 *Invited*

To be announced
Stephen H. Simpson
Institute of Scientific Instruments of the ASCR, v.v.i., Czech Republic

OMC5-2 9:30

Optical binding of two microparticles levitated in vacuum
Yoshihiko Arita[1], Ewan Wright[2], Kishan Dholakia[1]
[1]Univ. of St. Andrews, UK, [2]College of Optical Sciences, The Univ. of Arizona, USA

OMC5-3 9:45

Nano-ring arrays for sub-micron particle trapping
Xue Han, Viet Giang Truong, Síle Nic Chormaic
Okinawa Institute of Science and Technology Graduate Univ., Japan

OMC5-4 10:00

Rotational dynamics and heating of trapped nanovaterite particles
Yoshihiko Arita[1], Joseph M. Richards[2], Michael Mazilu[1], Gabriel C. Spalding[2], Susan E. Skelton Spesyvtseva[1], Kishan Dholakia[1]
[1]Univ. of St Andrews, UK, [2]Illinois Wesleyan Univ., USA

OMC5-5 10:15

Optical binding of particles in the evanescent field of microfiber modes
Maimaiti Aili, Viet Giang Truong, Síle Nic Chormaic
OIST Graduate Univ, Japan

----- 10:30-11:00 Coffee Break -----

XOPT <Room 313+314>

[XOPT5] 8:45-10:15
XFEL facilities
Chair: Y. Feng
SLAC National Accelerator Laboratory

XOPT5-1 8:45 *Invited*

Recent progress and development in hard X-ray instrumentation and applications at LCLS
Takahiro Sato
Linac Coherent Light Source, SLAC National Accelerator Laboratory, USA

XOPT5-2 9:15 *Invited*

Current status and future perspectives of SACLA
Yuichi Inubushi[1], Kensuke Tono[1], Tadashi Togashi[1], Shigeki Owada[2], Toshinori Yabuuchi[2], Tetsuo Katayama[1], Akira Kon[1], Ichiro Inoue[2], Taito Osaka[2], Makina Yabashi[2]
[1]JASRI, Japan, [2]RIKEN SPring-8 Center, Japan

XOPT5-3 9:45 *Invited*

Status of the European XFEL
Harald Sinn
European XFEL, Germany

[XOPT6] 10:15-10:30
Optical components & systems (II)
Chair: Y. Feng
SLAC National Accelerator Laboratory

XOPT6-1 10:15

Hard X-ray Split-and-Delay Optics with wavefront Division at SACLA
Takashi Hirano[1], Taito Osaka[2], Yasuhisa Sano[1], Yuichi Inubushi[3], Tadashi Togashi[3], Ichiro Inoue[2], Satoshi Matsuyama[1], Kensuke Tono[3], Kazuto Yamauchi[1], Makina Yabashi[2]
[1]Osaka University, Japan, [2]RIKEN SPring-8 Center, Japan, [3]JASRI, Japan

----- 10:30-11:00 Break -----

Oral, Friday, April 21 AM

ALPS <Room 511+512>

[ALPS16] 11:00-12:00
Terahertz Technology 2
Chair: Makoto Nakajima
Osaka Univ., Japan

ALPS16-1 11:00 *Invited*

Tunable and reconfigurable THz devices

Jinghua Teng
Inst. of Materials Res. and Eng. Agency for Sci., Tech. and Res. (A*STAR), Singapore

ALPS16-2 11:30

Simultaneous Generation and Detection of Multi-wavelength Terahertz Waves by Parametric Wavelength Conversion

K. Murate[1,2], K. Maeda[1], S. Hayashi[3], K. Kawase[1]
[1]Nagoya Univ., Japan, [2]JSPS, Japan, [3]National Inst. of Info. and Commun. Tech., Japan

ALPS16-3 11:45

Characterization of Unexplored Second-order Nonlinear Optical Coefficients of organic DAST Crystal

T. Notake, K. Nawata, Y. Takida, Y. Tokizane, Z. Han, M. Koyama, A. K. D. Bosco, and H. Minamide
RIKEN RAP, Teraphotonics Team, Japan

----- 12:00-13:15 Lunch Break -----

BICS <Room 419>

BICS7-4 11:00 *Invited*

Cell tracking for cell image analysis

Ryoma Bise[1], Yoichi Sato[2]
[1]National Institute of Informatics, Japan, [2]The Univ. of Tokyo, Japan

BICS7-5 11:30 *Invited*

Requirement of spatiotemporal resolution for imaging intracellular temperature distribution

Noriko Hiroi, Ryuichi Tanimoto, Kaito Ii, Mitsunori Ozeki, Kota Mashimo, Akira Funahashi
Keio Univ., Japan

----- 12:00-13:00 Lunch Break -----

CLES / LANSA <Room 416+417>

[AP2] 10:40-XX:XX
XXXXX
Chair: XXXXX
XXXXX

AP2-1 10:40 *Invited*

Study of nuclear structure by measuring neutrons from photodisintegration reactions with linear polarized gamma-ray beam

Takehito Hayakawa[1], Toshiyuki Shizuma[2], Akinori Takemoto[2], Masashi Yamaguchi[2], Ken Horikawa[2], Shuji Miyamoto[2], Sho Amano[2], Satoshi Chiba[2], Hidetoshi Akimune[2], Kazuyuki Ogata[2], Mamoru Fujiwara[2]
[1]National Institutes for Quantum and Radiological Science and Techonology, Japan, [2]Japan

AP2-2 11:20 *Invited*

Development of a neutron flat panel detector

Hiroyuki Takahashi
The University of Tokyo, Japan

AP2-3 12:00

Study for non-destructive detection of salt inside concrete using neutron-captured prompt-gamma rays at RANS

Yasuo Wakabayashi[1], Yuichi Yoshimura[1,2], Tomohiro Kobayashi[1], Maki Mizuta[1], Atsushi Taketani[1], Yoshimasa Ikeda[1], Takao Hashiguchi[1], Shinzo Yanagimachi[1], Hideyuki Sunaga[1], Yujiro Ikeda[1,3], Yoshie Otake[1]
[1]RIKEN Center for Advanced Photonics, RIKEN, Japan, [2]Tokyo Institute of Technology, Japan, [3]J-PARC Center, Japan Atomic Energy Agency, Japan

AP2-4 12:20

Optimization of experimental system design for benchmarking of large angle scattering reaction cross section at 14 MeV using two shadow bars

Naoya Hayashi, Seiki Ohnishi, Yuki Fujiwara, Sachie Kusaka, Fuminobu Sato, Isao Murata
Department of Sustainable Energy and Environmental Engineering, School of Engineering, Osaka University, Japan

Oral, Friday, April 21 AM

HEDS <Room 311+312>

[HEDS11] 10:50-12:00
Beams (ImPACT Session VII)
Chair: J. Faure
LOA, France

HEDS11-1 10:50 *Invited*

High energy electron accelerator platform at ELI Beamline, ultra-stable pointing investigations
C. Lazzarini, Tadzio Levato
ELI-Beamlines, Czeck Rep.

HEDS11-2 11:20

Experimental investigation of sheath asymmetry effects on proton beam spatial profile in high intensity laser solid interactions
Nicolas. P. Dover
QST, Japan

HEDS11-3 11:40

Study of Laser Wakefield Acceleration via Single-shot Non-destructive Electro-optic Sampling Diagnostics
Huang Kai
QST, Japan

----- 12:00-13:30 Lunch Break -----

ICNN <Room 414+415>

[ICNN7] 11:00-12:00
Low dimensional nanophotonics
Chair: XXXXX
XXXXX

ICNN7-1 11:00 *Invited*

Nanophotonics in low dimensions
Alexey Nikitin
CIC NAnogune, Ikerbasque, Spain

ICNN7-2 11:30

The optical response of a two-dimensional crystal
Michele Merano
Università degli studi di Padova, Italy

ICNN7-3 11:45

Growth and structure of In0.5Ga0.5Sb quantum dots on GaP(001) for nanomemories
Elisa M. Sala[1], Gernot Stracke[1], Sören Selve[2], Tore Niermann[3], Michael Lehmann[3], Sarah Schlichting[1], Felix Nippert[1], Gordon Callsen[1], Andrè Strittmatter[4], Dieter Bimberg[1]
[1]Institute of Solid State Physics, Technical University of Berlin, Germany, [2]Center for Electron Microscopy (ZELMI), Technical University of Berlin, Germany, [3]Institute for Optics and Atomic Physics (IOAP), Technical University of Berlin, Germany, [4]Institute of Experimental Physics, Otto-von-Guericke University Magdeburg, Germany

----- 12:00-13:30 Lunch -----

IP <Room 413>

[IP-21AM-2] 11:00-11:30
Holography
Chair: XXXXX
XXXXX

IP-21AM-2-1 11:00

3D Physically Based Rendering of Computer Generated Holograms by Orthographic Ray-Sampling
Shunsuke Igarashi[1], Tomoya Nakamura[1,2], Kyoji Matsushima[3], Masahiro Yamaguchi[1]
[1]Tokyo Institute of Technology, Japan, [2]PRESTO, JST, Japan, [3]Kansai University, Japan

IP-21AM-2-2 11:15

Optical Fabrication of DNA Hydrogel Using Holographic Pattern
Suguru Shimomura, Takahiro Nishimura, Yusuke Ogura, Jun Tanida
Osaka University, Japan

Oral, Friday, April 21 AM

LDC <Room 301>

[LDC6] 10:45-11:45
Speckle Reduction
Co Chairs: Hiroshi Murata
Osaka Univ., Japan
Lung-Han Peng
National Taiwan Univ., Taiwan

LDC6-1 10:45 *Invited*

Simulation and Fabrication to the Speckle Reduction in Compact Optical Engine for Laser Projection Displays
Young-Joo Kim, Jae-Yong Lee, Se-Hwan Jang, Sungbin Jeon, No-Cheol Park
Yonsei Univ., Korea

LDC6-2 11:15

Speckle Contrast Measurement Rigorously in Human Eye Response Time
Koji Suzuki, Shigeo Kubota
Oxide Corp., Japan

LDC6-3 11:30

Laser Speckle Reduction by Using Motionless Image Conduits
Zhaomin Tong[1], Wenzhi Cheng[1], Shaohua Song[1], Zhuo Cai[1], Yifei Ma[1], Xuyuan Chen[1,2], Weiguang Ma[1], Liantuan Xiao[1], Suotang Jia[1]
[1]Shanxi Univ., Republic of China, [2]Univ. College of Southeast Norway, Norway

LEDIA <Room 411+412>

[LED6] 10:45-12:15
Laser Diodes
Chairs: Jaehee Cho
Chonbuk National University, Korea
Kazunobu Kojima
Tohoku University, Japan

LED6-1 10:45 *Invited*

Advances in AlGaN-Based Laser Diodes
Zlatko Sitar
North Carolina State University, USA

LED6-2 11:15

Influence of the Quantum Well Width on the Optical Properties of AlGaN-based Light Emitters in the Deep UV Spectral Range
Christoph Reich[1], Martin Feneberg[2], Martin Guttmann[1], Johannes Enslin[1], Frank Mehnke[1], Christian Kuhn[1], Tim Wernicke[1], Michael Kneissl[1]
[1]Technische Universität Berlin, Germany, [2]Otto-von-Guericke-Universität, Germany

LED6-3 11:30 *Invited*

Recent Progress in Quantum Dot Lasers
Takeo Kageyama[1], Mitsuru Sugawara[2], Yasuhiko Arakawa[3]
[1]NanoQuine, The University of Tokyo, Japan, [2]QD laser, Japan, [3]IIS, The University of Tokyo, Japan

LED6-4 12:00

GaAsP quantum well tunable single-mode semiconductor lasers with deeply etched periodic structures
Masahiro Uemukai, Akihiro Yamashita, So Kusumoto, Ryuji Katayama
Osaka University, Japan

LNPC <Room 317>

LNPC6-5 10:45

Gamma Polari-Calorimeter: an instrument for gamma ray polarimetry using the pair production process
M. Cuciuc[1], S. Ataman[1], L. D'Allesi[1], K. Homma[2,3], T. Moritaka[4], Y. Nakamiya[5], M. Rosu[1], K, Seto[1], O. Tesileanu[1]
[1]ELI-NP, IFIN-HH, Romania, [2]Hiroshima Univ., Japan, [3]IZEST, Ecole Polytechnique, France, [4]National Central Univ., Taiwan, [5]ICR, Kyoto Univ., Japan

LNPC6-6 11:05

Search for Vacuum Magnetic Birefringence With Pulsed Magnet and Fabry-Pérot Cavity
S. Kamioka[1], X. Fan[1], T. Inada[2], T. Yamazaki[2], T. Namba[2], S. Asai[1], J. Omachi[1], K. Yoshioka[3], M. Kuwata-Gonokami[1], A. Matsuo[4], K. Kindo[4], H. Nojiri[5]
[1]The univ. of Tokyo, Japan, [2]ICEPP, The univ. of Tokyo, Japan, [3]PSC, The univ. of Tokyo, Japan, [4]ISSP, The univ. of Tokyo, Japan, [5]IMR. Tohoku Univ., Japan

LNPC6-7 11:25

Search for Vacuum Diffraction Using high power laser and X-ray Free Electron Laser SACLA
Y. Seino[1], T. Yamazaki[2], T. Inada[2], T. Namba[2], S. Asai[1], T. Yabuuchi[3], T. Togashi[3,4], Y. Inubushi[3,4], K. Tamasaku[3], M. Yabashi[3,4], T. Ishikawa[3]
[1]The univ. of Tokyo, Japan, [2]ICEPP, The univ. of Tokyo, Japan, [3]RIKEN, SPring-8, Japan, [4]JASRI, Japan

----- 12:15-13:15 Lunch -----

Oral, Friday, April 21 AM

LSSE <Room 302>

LSSE6-2 11:00 *Invited*

Solar-Driven Photochemical and Electrochemical Energy Generation

Joel Ager[1,2,3]
[1]Joint Center for Artificial Photosynthesis, Lawrence Berkeley National Laborary, USA, [2]The Materials Sciences Division of Lawrence Berkeley National Laboratory, USA, [3]Department of Materials Science and Engineering, University of California Berlceley, USA

LSSE6-3 11:30 *Invited*

User-on-demand Solar to Power System with Solar to Hydrogen on site Storage

Katsushi Fujii[1,2,3], Kayo Koike[2], Masakazu Sugiyama[2], Yoshiaki Nakano[2], Shinichiro Nakamura[3], Satoshi Wada[3]
[1]The University of Kitakyushu, Japan, [2]The University of Tokyo, Japan, [3]RIKEN, Japan

OMC <Room 418>

[OMC6] 11:00-12:15
Optical Manipulation VI
Chair: Gabriel Molina-Terriza
Macquarie Univ., Australia

OMC6-1 11:00 *Invited*

Optical tweezer manipulation for atom tetris

Jaewook Ahn
KAIST, Korea, Republic of

OMC6-2 11:30

Dynamics of optically levitated microparticles in vacuum placed in 2D and 3D optical potentials possessing orbital angular momentum

Yoshihiko Arita[1], Michael Mazilu[1], Mingzhou Chen[1], Ewan Wright[2], Kishan Dholakia[1]
[1]Univ. of St Andrews, UK, [2]College of Optical Sciences, The Univ. of Arizona, USA

OMC6-3 11:45

Continuous rotation of a cholesteric liquid crystalline droplet by a circularly polarized optical tweezers

Yasuyuki Kimura
Kyushu Univ., Japan

OMC6-4 12:00

Nanoparticle trapping and control in a hollow whispering gallery resonator

Jonathan M. Ward, Yong Yang, Síle Nic Chormaic
Okinawa Institute of Science and Technology Graduate Univ., Japan

----- 12:15-13:00 Lunch Break -----

XOPT <Room 313+314>

[XOPT7] 11:00-12:00
Photon diagnostic & new techniques
Chair: Y. Inubushi
JASRI

XOPT7-1 11:00

Determination of XFEL pulse duration via X-ray intensity interferometry

Ichiro Inoue[1], Toru Hara[1], Yuichi Inubushi[2], Kensuke Tono[2], Hitoshi Tanaka[1], Makina Yabashi[1]
[1]RIKEN SPring-8 Center, Japan, [2]JASRI, Japan

XOPT7-2 11:15

Tunable Young's double pinhole system coupled with lens for hard X-ray spatial coherence characterization.

Irina Snigireva[1], Mikhail Lyubomirskiy[2], Anatoly Snigirev[3]
[1]ESRF, France, [2]DESY, Germany, [3]Baltic Federal University, Russia

XOPT7-3 11:30

Single bunch extraction by SAW driven bunch chopper

Simone Vadilonga[1], Ivo Zizak[1], Andrei Petsiuk[1], Dmitry Roshchupkin[2], Igor Dolbnya[3], Kawal Sawhney[3], Alexei Erko[1]
[1]Helmholtz Zentrum Berlin, Germany, [2]Institute of Microelectronics Technology and High Purity Materials, Russian Academy of Sciences, Russia, [3]Diamond Light Source, England

XOPT7-4 11:45

New design of environmental cells as a first step toward 3D imaging in solution by X-ray laser diffraction

Akihiro Suzuki[1], Tatsuro Tachibana[1], Naoya Tani[1], Yasumasa Joti[2], Yoshitaka Bessho[3], Takashi Kimura[1], Yoshinori Nishino[1]
[1]Hokkaido University, Japan, [2]JASRI, Japan, [3]Academia Sinica, Taiwan

----- 12:00-13:00 Lunch -----

Oral, Friday, April 21 PM

ALPS <Room 511+512>

[ALPS17] 13:15-15:30
Short wavelength
Chairs: Yutaka Nagata
RIKEN, Japan
Nobuhisa Ishii
The Univ. of Tokyo, Japan

ALPS17-1 13:15 *Invited*

kW-class picosecond thin-disk pre-pulse laser Perla for efficient EUV generation
Martin Smrž[1], J. Mužík[1,2], O. Novák[1], M. Chyla[1], A. Endo[1], T. Mocek[1]
[1]HiLASE Centre, Inst. of Phys. AS CR, Czech Republic, [2]Faculty of Nuclear Sci. and Phys. Eng., Czech Technical Univ. in Prague, Czech Republic

ALPS17-2 13:45 *Invited*

Development of 250 W LPP EUV Light Source for HVM Lithography
Tatsuya Yanagida
Gigaphoton Inc., Japan

ALPS17-3 14:15

Few cycle pulse generation from a bandwidth– optimized high energy Yb-doped fiber laser source
L. Lavenu[1,2], M. Natile[3,4], F. Guichard[2], Q. Mocaer[2], Y. Zaouter[2], M. Hanna[1], E. Mottay[2], andP. Georges[1]
[1]Lab. Charles Fabry, Inst. d'Optique, CNRS, France, [2]Amplitude Sys., France, [3]Amplitude Tech., France, [4]LIDyL, CEA, France

ALPS17-4 14:30

Time-Resolved VUV Reflection Spectroscopy for Spatio-Temporal Diagnosis of Ultrafast Plasma Formation
R. Itakura, H. Akagi, Y. Wada, and T. Otobe
KPSI, QST, Japan

ALPS17-5 14:45

Development of Multi-fragment Momentum Imaging Method for Attosecond-Pump Attosecond- Probe of Ultrafast Dynamics of Polyatomic Molecules
T. Okino[1,2], Y. Nabekawa[1], K. Midorikawa[1]
[1]RIKEN Cent. for Adv. Photonics, Japan, [2]JST PRESTO, Japan

ALPS17-6 15:00

UV-driven harmonic generation for time-resolved ultraviolet photoelectron spectroscopy of polyatomic molecules
S. Adachi, M. Sato, and T. Suzuki
Grad. Sch. of Sci., Kyoto Univ., Japan

ALPS17-7 15:15

Self-compression of sub-mJ, 14 fs pulses in a deep ultraviolet filament
S. Adachi, T. Suzuki
Grad. Sch. of Sci., Kyoto Univ., Japan

BICS <Room 419>

[BICSp8] 13:00-14:00
Posters-Friday
<Exhibition Hall A>
Poster session program p.XX

----- 14:00-14:15 Break -----

[BICS9] 14:15-15:30
Optical Coherence Tomography
Chair: Yoshihisa Aizu
Muroran Institute of Technology, Japan

BICS9-1 14:15 *Invited*

Multi-contrast imaging of human posterior eye by Jones matrix optical coherence tomography
Yoshiaki Yasuno
Univ. of Tsukuba, Japan

BICS9-2 14:45

Ultra-high resolution polarization-sensitive optical coherence tomography for imaging of the retinal nerve fiber layer
Barry Cense, Maddipatla Reddikumar, Joel Cervantes
Utsunomiya Univ., Japan

BICS9-3 15:00

Study on laser-assisted drug delivery with optical coherence tomography
Wen-Guei Tsai[1], Ting-Yen Tsai[1], Chih-Hsun Yang[2], Meng-Tsan Tsai[1]
[1]Chang Gung Univ., Taiwan, [2]Chang Gung Memorial Hospital, Taiwan

BICS9-4 15:15

A 3.4-mm beam diameter system for retinal imaging with OCT and adaptive optics
Maddipatla Reddikumar, Barry Cense
Utsunomiya Univ., Japan

----- 15:30-16:00 Coffee Break -----

CLES / LANSA <Room 416+417>

Oral, Friday, April 21 PM

HEDS <Room 311+312>

[HEDS12] 13:30-15:00
Beams/ Rad. Source (ImPACT Session VIII)
Chair: A. Zhidkov
Osaka Univ., japan

HEDS12-1 15:50 *Invited*

Nuclear Fusion in Laser-Driven Counter-Stream Collisionless Plasmas
Liming Chen
IOP, P.R.China

HEDS12-2 14:00

Nonlinear inverse Compton scattering experiment in BNL ATF
Yusuke Sakai
UCLA, USA

HEDS12-3 14:20

BISER: Burst Intensification by Singularity Emitting Radiation
Alexander Pirozhkov
QST, Japan

HEDS12-4 14:40

Status and perspective of an experimental platform for high-energy density science at SACLA
Akira Kon
JASRI, Japan

----- 15:00-15:30 Break -----

ICNN <Room 414+415>

[ICNN8] 13:30-15:30
Devices and materials
Chair: XXXXX
XXXXX

ICNN8-1 13:30

32 Gbps Operation in Si Photonic Crystal Slow Light Modulator
Yosuke Terada, Tomoki Tatebe, Yosuke Hinakura, Toshihiko Baba
Yokohama National University, Japan

ICNN8-2 13:45

Design of Double-slotted Photonic Crystal Nanocavity Robust to Structural Fluctuations
Masahiro Nakadai, Ryotaro Konoike, Yoshinori Tanaka, Takashi Asano, Susumu Noda
Department of Electronic Science and Engineering, Kyoto University, Japan

ICNN8-3 14:00

Photonic Crystal Nanocavity Photodetector Integrated with p-i-n Junction Fabricated by Photolithography Process.
Nurul Ashikin Binti Daud, Yuta Ooka, Tomohiro Tetsumoto, Takasumi Tanabe
Keio University, Japan

ICNN8-4 14:15

Ultra-miniaturized optoelectronic system for rapid quantitative label-free detection of harmful species in food
Ioannis Raptis[1], Konstantinos Misiakos[1], Eleni Makarona[1], Alexandros Salapatas[1], Panagiota Petrou[1], Evangelos Valamontes[2], Sotirios Kakabakos, Romanos Fyrogenis[3], Dimitrios Goustouridis[3]
[1]NCSR Demokritos, Greece, [2]TEI of Athens, Greece, [3]ThetaMetrisis SA, Greece

ICNN8-5 14:30

Two mode channel switchable hybrid grating assisted contra-directional coupler
Xiangjie Zhao, Yuxi Wang, Qingzhong Huang, Jinsong Xia
Wuhan National Laboratory for Optoelectronics, China

ICNN8-6 14:45

Novel Silicon-Organic Hybrid Micro-Ring Modulator
Feng Qiu, Shiyoshi Yokoyama
Kyushu University, Japan

ICNN8-7 15:00

Enhanced Light-Coupling in Laser-Crystallised Silicon Thin-Film Solar Cells on Glass by Moth-Eye Anti-Reflection Foil
Mohd Zamir Pakhuruddin[1,2], Sven Kühnapfel[3], Jialiang Huang[2], Jonathan Dore[2], Stefan Gall[3], Sergey Varlamov[2]
[1]School of Photovoltaic and Renewable Energy Engineering, University of New South Wales, Sydney 2052, Australia, Malaysia, [2]School of Photovoltaic and Renewable Energy Engineering, University of New South Wales, Sydney 2052, Australia, [3]Helmholtz-Zentrum Berlin, Institute for Silicon-Photovoltaics, Kekuléstr. 5, D-12489 Berlin, Germany

[Closing] 15:15-15:30
Closing Remarks
Y. Arakawa
The University of Tokyo, Japan

IP <Room 413>

[IP-21PM-1] 13:00-15:00
INFORMATION PHOTONICS POSTER SESSION
<Exhibition Hall A>
Poster session program p.XX

Oral, Friday, April 21 PM

LDC <Room 301>

[LDC7] 13:15-15:15
Advanced Laser & Lighting
Co Chairs: Tetsuya Yagi
Mitsubishi Electric Corp., Japan
Masafumi Ide
Magic Leap, Japan

LDC7-1 13:15 *Invited*

Compact RGB laser sources
K. Paschke, G. Blume, N. Werner, J. Hofmann, R. Bege, D. Feise, A. Sahm
Ferdinand-Braun-Institut, Leibniz-Institut für Höchstfrequenztechnik, Germany

LDC7-2 13:45

30 W CW Red fiber Laser for RGB laser system
Surin A.A., Borisenko T.E., Stirmanov Y.S.
"IRE-Polus" Ltd (IPG Photonics Russian department), Russia

LDC7-3 14:00

Speckle Reduction Using Fiber-laser Pumped $X^{(2)}$ Nonlinear Photonic Crystals with Double-slit Structures
Seong-Jin Son[1], Hsin-Jung Lee[2], Ya-Ching Huang[2], Do-Kyeong Ko[1], Lung-Han Peng[2], Nan Ei Yu[1]
[1]Gwangju Institute of Science and Technology, South Korea, [2]National Taiwan Univ., Taiwan

LDC7-4 14:15

Compact Microchip-seeded Multistage MOPA System for Laser Induced Breakdown Applications
V. Yahia, T. Taira
Institute for Molecular Science, Japan

LDC7-5 14:30 *Invited*

Liquid Crystal Display with RGB Laser Backlight
Y. Fujii, E. Niikura, N. Okimoto, S. Maeda, H. Yasui, A. Heishi
Mitsubishi Electric Corp., Japan

LDC7-6 15:00

Simple and Small Holographic RGB Illumination Unit. ~ Ega-rim ~
Toshihiro Kasezawa[1], Hideyoshi Horimai[1], Hiroshi Tabuchi[2], Toshitaka Nara[2], Tsutomu Shimura[3]
[1]Egarim Co., Ltd, Japan, [2]Okamoto Glass Co., Ltd., Japan, [3]The Univ.of Tokyo, Japan

LEDIA <Room 411+412>

[LED7] 13:15-15:15
Nanostructures
Chairs: Christophe Durand
Centre National de la Recherche Scientifique (CNRS), France
Tomoyuki Tanikawa
Tohoku University, Japan

LED7-1 13:15 *Invited*

Emerging technologies based on III-nitride nano-LEDs
Hilde Hardtdegen, Martin Mikulics
Research Center Juelich GmbH, Peter Gruenberg Institute, Germany

LED7-2 13:45 *Invited*

Classical and Quantum Light Generation Using Nano- and Micro-Structured Nitride Semiconductors
Yonghoon Cho
Korea Advanced Institute of Science and Technology (KAIST), Korea

LED7-3 14:15

Evolution of Free Carrier Concentration within Core-Shell Microrod LEDs: Nanometer-resolved Correlation of Cathodoluminescence and µ-Raman
Frank Bertram[1], Marcus Müller[1], Peter Veit[1], Christian Nenstiel[2], Gordon Callsen[2], Axel Hofmann[2], Juergen Christen[1], Andreas Waag[3], Matin Mohajerani[3], Jana Hartmann[3], Hao Zhou[3], Hergo-H. Wehmann[3]
[1]University of Magdeburg, Germany, [2]TU Berlin, Germany, [3]TU Braunschweig, Germany

LED7-4 14:30

Nano-scale correlation of the optical, structural, and compositional properties of InGaN/GaN core-shell nanorod LEDs
Marcus Müller[1], Sebastian Metzner[1], Peter Veit[1], Florian Krause[2], Frank Bertram[1], Tilman Schimpke[3], Adrian Avramescu[3], Martin Strassburg[3], Andreas Rosenaer[2], Jürgen Christen[1]
[1]Otto-von-Guericke-University Magdeburg, Germany, [2]University of Bremen, Germany, [3]OSRAM Opto Semiconductors GmbH, Germany

LED7-5 14:45

InGaN nanowires for light emitting diodes applications
Xin Zhang[1], Benedikt Haas[2], Marion Gruart[2], Eric Robin[2], Bruno Gayral[2], Catherine Bougerol[3], Jean-Luc Rouvière[2], Bruno Daudin[2]
[1]CEA-Grenoble and Aledia, France, [2]CEA-Grenoble, France, [3]CNRS-Institut Néel, France

LED7-6 15:00

Fabrication of idiosyncratic GaN structures by ICP-RIE with enhanced chemical etching conditions and its applications
Narihito Okada[1], Kohei Nojima[1], Naoto Ishibashi[1], Kei Nagatoshi[1], Norihiro Itagaki[1], Ryo Inomoto[1], Shinichi Motoyama[2], Takayuki Kobayashi[2], Kazuyuki Tadatomo[1]
[1]Yamaguchi University, Japan, [2]R&D Department, SAMCO Inc., Japan

LNPC <Room 317>

[LNPC7] 13:15-15:10
Radiations in intense field
K. Kando
QST, Japan

LNPC7-1 13:15

Non-perurbative aspects of Intense Field QED
A. M. Fedotov, A. A. Mironov
MEPhI, Russia

LNPC7-2 13:45 *Invited*

Radiation dominated nonlinear Compton scattering: signatures of quantum dynamics and attosecond gamma-bursts
K. Z. Hatsagortsyan, J. -X. Li, C. H. Keitel
MPI, Germany

LNPC7-3 14:15

New exact solutions for QED in external fields
A. Ildelton, T. Heinzl
Plymouth Univ., UK

LNPC7-4 14:45

Radiation reaction on a Brownian scalar electron in high-intensity laser
K. Seto
ELI-NP, IFIN-HH, Romania

----- 15:15-15:45 Break -----

Oral, Friday, April 21 PM

LSSE <Room 316>

LSSE6-4 13:10 *Invited*

Recent R&D Status of Solar Power Satellite with Wireless Power Transfer

Naoki Shinohara
Kyoto University, Japan

LSSE6-5 13:40 *Invited*

Super high efficiency concentrator photovoltaic system and its application to make hydrogen

Kensuke Nishioka
University of Miyazaki, Japan

[LSSE7] 14:10-16:50
Remote Sensing
Chair: Norihito Saito
RIKEN Center for Advanced Photonics, Japan

LSSE7-1 14:10

Pulsating aurora-induced Na density depletion in the polar MLT region: high-speed sodium lidar and EISCAT radar observation

Toru Takahashi[1], Takuo Tsuda[2], Keisuke Hosokawa[2], Satonori Nozawa[3], Yasunobu Ogawa[1,4], M. Tsutsumi[1,4], Y. Hiraki[2], T. D. Kawahara[5], N. Saito[6], S. Wada[6], T. Kawabata[3], C. Hall[7], H. Miyaoka[1]
[1]National Institute of Polar Research, Japan, [2]Department of Communication Engineering and Informatics, University of Electro-communications, Japan, [3]Institute for Space-Earth Environmental Research, Nagoya University, Nagoya, Japan, [4]Graduate University for Advanced Studies, SOKENDAI, Japan, [5]Faculty of Engineering, Shinshu University, Japan, [6]RIKEN Center for Advanced Photonics, RIKEN, Japan, [7]Tromsø Geophysical Observatory, The Arctic University of Norway, Norway

LSSE7-2 14:30 *Invited*

Sodium LIDAR observations of polar mesosphere and lower thermosphere

Satonori Nozawa[1], T. Kawahara[2], T. T. Tsuda[3], Y. Ogawa[4], T. Takahashi[4], N. Saito[5], S. Wada[5], H. Fujiwara[6], M. Tsutsumi[4], C. Hall[7], T. Kawabata[1], Y. Ogawa[1], A. Brekke[7]
[1]ISEE, Nagoya University, Japan, [2]Shinshu University, Japan, [3]The University of Electro-Communications, Japan, [4]NIPR, Japan, [5]RIKEN, Japan, [6]Seikei University, Japan, [7]UiT The Arctic University of Norway, Norway

OMC <Room 418>

[OMCp7] 13:00-14:00
Posters-Friday
<Exhibition Hall A>
Poster session program p.XX

[OMC8] 14:00-15:30
Optical Manipulation VII
Chair: Alexander B. Stilgoe
The Univ. of Queensland, Australia

OMC8-1 14:00-14:30 *Invited*

Dynamic optics for microscopy and photonic engineering

Martin J. Booth[1], Friedrich-Alexander[2]
[1]Univ. of Oxford, UK, [2]Univ. Erlangen-Nürnberg, Germany

OMC8-2 14:30

Near-field optical forces-assisted molecular nanoparticle deposition in the nanogap of plasmonic nanoantennas

Christophe Pin[1], Shutaro Ishida[1], Genta Takahashi[1], Tsuyoshi Fukaminato[2], Keiji Sasaki[1]
[1]Hokkaido Univ., Japan, [2]Kumamoto Univ., Japan

OMC8-3 14:45

Analysis of a nano-particle rotation using a plasmonic trimer nano-structure

Shutaro Ishida, Keiji Sasaki
Hokkaido University, Japan

OMC8-4 15:00

Temperature measurement of the metal particle during laser-induced migration in the glass

Nobuyasu Nishioka, Hirofumi Hidai, Souta Matsusaka, Akira Chiba, Noboru Morita
Chiba Univ., Japan

OMC8-5 15:15

On-chip photonic tweezers for photonics, microfluidics, and biology

Christophe Pin[1,2], Claude Renaut[1,2], Manon Tardif[2,3], Jean-Baptiste Jager[2], Eric Delamadeleine[2], Emmanuel Picard[2], David Peyrade[4], Emmanuel Hadji[2], Frédérique de Fornel[4], Benoît Cluzel[1]
[1]Univ. de Bourgogne - Franche Comté, France, [2]CEA Grenoble, France, [3]Univ. Grenoble Alpes, France, [4]Ctr. National de la Recherche Scientifique, France

----- 15:30-16:00 Coffee Break -----

XOPT <Room 313+314>

Poster Session 13:00-14:30
<Exhibition Hall A>
Poster session program p.XX

----- 14:30-14:45 Break -----

[XOPT9] 14:45-16:00
Optical components & systems (III)
Chair: C. Schroer
DESY/University of Hamburg

XOPT9-1 14:45-15:15 *Invited*

Diffractive X-ray Optics: Opportunities for Photon Science at Large Scale Facilities

Christian David
Paul Scherrer Institut, Switzerland

XOPT9-2 15:15-15:30

Multilayer based monochromators for upgraded ESRF beamlines

Christian Morawe, Jean-Christophe Peffen
ESRF, France

XOPT9-3 15:30-15:45

X-ray Kinoform Beamsplitters

Maxime Lebugle, Felix Marschall, Gediminas Seniutinas, Vitaliy A. Guzenko, Daniel Grolimund, Christian David
Paul Scherrer Institut, Switzerland

XOPT9-4 15:45-16:00

Development of X-ray optics for DLSRs

Makina Yabashi
RIKEN SPring-8 Center, Japan

----- 16:00-16:15 Break -----

Oral, Friday, April 21 PM

ALPS <Room 511+512>

[Closing] 15:30

Award Ceremony 15:30-15:40

Hiromitsu Kiriyama
Program Committee Chair
QST., Japan

Closing Remarks 15:40-15:50

Fumihiko Kannari
Steering Committee Chair
Keio Univ., Japan

BICS <Room 419>

[BICS10] 16:00-17:30

Computational Imaging

Chairs: Yusuke Ogura
Osaka Univ., Japan
Izumi Nishidate
Tokyo Univ. of Agriculture and Technology, Japan

BICS10-1 16:00 *Invited*

Advancements in remote physiological measurement and applications in human-computer interaction

Daniel McDuff[1,2]
[1]Microsoft Research Cambridge, USA, [2]MIT Media Lab., USA

BICS10-2 16:30

Three-dimensional movement analysis for near infrared system using stereo vision and optical flow techniques

Geliztle A. Parra Escamilla,
David Ignacio Serrano-García, Yukitoshi Otani
Utsunomiya Univ., Japan

BICS10-3 16:45

In vivo imaging of spontaneous low-frequency oscillations in cerebral hemodynamics with a digital red-green-blue camera

Afrina Mustari
Tokyo Univ. of Agriculture and Technology, Japan

BICS10-4 17:00

Simultaneous three-dimensional Imaging of multi-focal microscopy

Chen Yen Lin, National Taiwan Univ., Taiwan

BICS10-5 17:15

Bayesian based fluorescence coded imaging using quantum dots

Takahiro Nishimura, Hitoshi Kimura,
Yusuke Ogura, Jun Tanida
Osaka Univ., Japan

CLES / LANSA <Room 416+417>

Oral, Friday, April 21 PM

HEDS <Room 311+312>

[HEDS13] 15:30-17:00
Beams/ R Rad. Source
Chair: A. Pirozhkov
QST, Japan

HEDS13-1 15:30

Intense surface wave excitation on a metal wire by intense laser interaction with a foil target
Kensuke Teramoto
Kyoto Univ., Japan

HEDS13-2 15:50

Grating-based dielectric laser accelerator for subrelativistic electrons
Zhaofu Chen
The University of Tokyo, japan

HEDS13-3 16:10

Laser-filament-induced discharges for electron wake field acceleration by PW class laser pulses
Alexei Zhidkov
Osaka Univ., japan

[Closing] 16:30-16:45
Closing Remarks 16:30
S.V. Bulanov
QST, Japan

ICNN <Room 414+415>

IP <Room 413>

[IP-21PM-2] 15:30-16:30
Imaging and Display
Chair: XXXXX
XXXXX

IP-21PM-2-1 15:30

About Resolution of Refocused Image and Generated 3D Image from Data Acquired by Light-Field Camera
Toru Iwane
NIKON Corporation, Japan

IP-21PM-2-2 15:45

Graphene Based LC Devices for Near Infrared Image Processing
Vera Marinova[1,2], Shiuan H Lin[1], Stefan Petrov[1], Chia M Chang[1], Yi H Lin[1], Ken Y Hsu[1]
[1]National Chiao Tung University, Taiwan, [2]Institute of Optical Materials and Technologies, Bulgaria

IP-21PM-2-3 16:00

Analysis of Three-Dimensional Screen Composed of Lens Array and Retroreflector Sheet and its Implementation with Projection-Type Integral Imaging
Young Min Kim, Sung-Wook Min, Seunghwi Ryu, Hyeongkyu Do
Kyung Hee University, Republic of Korea

IP-21PM-2-4 16:15

Holographic Accesses for Volumetric Bubble Display
Kota Kumagai, Yoshio Hayasaki
Utsunomiya University, Japan

[IP-21PM-3] 16:30-16:45
AWARD & CLOSING REMARK
XXXXX
XXXXX

Oral, Friday, April 21 PM

LDC <Room 301>

[LDC8] 15:30-15:50
Postdeadline session
Chair: Sunao Kurimura
National Inst. for Materials Science, Japan

LDC8-1 15:30

XXXXXXXXXXXXX
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LDC8-2 15:40

XXXXXXXXXXXXX
XXXXX
XXXXX

LEDIA <Room 411+412>

[LED8] 15:45-17:00
Multicolor & White LEDs
Chairs: Yonghoon Cho
Korea Advanced Institute of Science and Technology (KAIST), Korea
Narihiro Okada
Yamaguchi University, Japan

LED8-1 15:45 *Invited*

Multi-color Flexible LED Based on Nitride Nanowires
Christophe Durand
Centre National de la Recherche Scientifique (CNRS), France

LED8-2 16:15

Phosphor-free broadband light-emitting diode
Hoi Wai Choi
The University of Hong Kong, Hong Kong

LED8-3 16:30 *Invited*

Colour-crafted phosphor-free white light emitters via in-situ nanostructure engineering
Daehong Min, Donghwy Park, Kyuseung Lee, Okhyun Nam
Korea Polytechnic University, Korea

[LED9] 17:00-17:30
Tutorial Session
Chair: Gen-ichi Hatakoshi
Waseda University, Japan

LED9-1 17:00 *Invited*

Study of Point Defects in Nitrides and Oxides by Means of Positron Annihilation
Akira Uedono
University of Tsukuba, Japan

[Closing] 17:30-17:45
Closing Remarks
Tetsuya Takeuchi
Meijyo University, Japan

LNPC <Room 317>

[LNPC8] 15:30-17:20
Laser driven nuclear physics
Chair: O. Tesileanu
ELI-NP, IFIN-HH, Romania

LNPC8-1 15:30 *Invited*

Nulcear Astrophysics in laser deriven gamma-ray pulse
T. Hayakawa[1,2], T. Nakamura[3], T. Kajino[2,4,5]
[1]QST, Japan, [2]NAOJ, Japan, [3]FIT, Japan, [4]The univ. of Tokyo, Japan, [5]Beihang Univ., China

LNPC8-2 16:00 *Invited*

Prospects of laser-driven ultra-dense ion bunches for the generation of extremely neutron-rich isotopes
P. G. Thirolf
LMU, Germany

LNPC8-3 16:30

Production and Photoexcitation of Nuclear Isomers at ELI-NP
L. D'Alessi[1], Y. Xu[1], M. Zeng[1], S. Aogaki[i1], K. Seto[1], O. Tesileanu[1], K. Homma[2,3], H. Utsunomiya[4]
[1]ELI-NP, IFIN-HH, Romania, [2]Hiroshima Univ., Japan, [3]IZEST, Ecole Polytechnique, Fance, [4]Konan Univ., Japan

LNPC8-4 16:50 *Invited*

Laser Driven Nuclear Astrophysics Studies at ELI-NP
F. Negoita
ELI-NP, IFIN-HH, Romania

[Closing] 17:20-17:25
Closing Remarks
K. Homma[1,2]
[1]Hiroshima Univ., Japan, [2]IZEST, Ecole Polytechnique, France

Oral, Friday, April 21 PM

LSSE <Room 316>

LSSE7-3 15:30

Study on the Earth's metallic layers using optical remote sensing observations

Takuo T. Tsuda[1], N. Saito[2], S. Nozawa[3], T. D. Kawahara[4], T. Kawabata[3], T. Takahashi[5], C. M. Hall[6], S. Wada[2], T. Nakamura[5], M. K. Ejiri[5], T. Nishiyama[5], M. Abo[7], K. Tsuno[2], J. Gumbel[8], J. Hedin[8]
[1]The University of Electro-Communications, Japan, [2]RIKEN, Japan, [3]Nagoya University, Japan, [4]Shinshu University, Japan, [5]The Arctic University of Norway, Norway, [6]National Institute of Polar Research, Japan, [7]Tokyo Metropolitan University, Japan, [8]Stockholm University, Sweden

LSSE7-4 15:50 *Invited*

Observations of the upper atmosphere using resonance scatter lidars

Takuji Nakamura[1], Mitsumu K. Ejiri[1], Makoto Abo[2], Takuya D. Kawahara[3], Takanori Nishiyama[1], T. T. Tsuda[4], K. Tsuno[5,1]
[1]National Institute of Polar Research, Japan, [2]Tokyo Metropolitan University, Japan, [3]Shinshu University, Japan, [4]The University of Electro-Communications, Japan, [5]RIKEN, Japan

LSSE7-5 16:20 *Invited*

High-speed and high-resolution LED mini-lidar on planet

Tatsuo Shiina
Chiba University, Japan

[Closing] 16:50-16:55
Closing Remarks
Toshikazu Ebisuzaki
Conference Chair of LSSE 2017
Chief Scientist, Computational Astrophysics Laboratory, RIKEN, Japan

OMC <Room 418>

[OMC9] 16:00-17:30
Optical Manipulation VIII
Chair: Hiromi Okamoto
Institute for Molecular Science, Japan

OMC9-1 16:00 *Invited*

To be announced

Hajime Ishihara
Osaka Prefecture Univ., Japan

OMC9-2 16:30

Generation of chiral optical near-fields with non-chiral metallic nanostructures and linearly polarized light

Shun Hashiyada[1,2], Tetsuya Narushima[1,2,3], Hiromi Okamoto
[1]Institute for Molecular Science, Japan, [2]The Graduate Univ. for Advanced Studies (Sokendai), Japan, [3]PRESTO, Japan Science and Technology Agency, Japan

OMC9-3 16:45

Enhancement of linear/nonlinear optical responses of molecular vibrations using metal nanoantennas

Ikki Morichika[1], Fumiya Kusa[2], Akinobu Takegami[2], Satoshi Ashihara[1]
[1]The Univ. of Tokyo, Japan, [2]Tokyo Univ. of Agriculture and Technology, Japan

OMC9-4 17:00

Localized field control at the nano-scale

Hideki Fujiwara, Yuki Yasuda, Hiroaki Orita, Shutaro Ishida, Keiji Sasaki
Hokkaido Univ., Japan

OMC9-5 17:15

Strong electric field enhancement in a gold/silica bow-tie nano-antenna

Evgeny G. Mironov[1], Abdul Khaleque[2], Fardad Azarmi[1,3]
[1]Skolkovo Institute of Science and Technology, Russian Federation, [2]UNSW Canberra, Australia, [3]North Dakota State Univ., USA

[Closing] 17:30-17:45
Closing Remarks
Takashige Omatsu
Chiba Univ., MCRC Chiba Univ., Japan

XOPT <Room 313+314>

[XOPT10] 16:15-17:45
Optical components & systems (IV)
Chair: H. Sinn
European XFEL

XOPT10-1 16:15-16:45 *Invited*

Future directions in X-ray Optics at Diamond

Kawal Sawhney
Diamond Light Source, UK

XOPT10-2 16:45-17:00

Variable Resolving Power Soft X-ray Self-Seeding Optical Design

Yiping Feng, Gabriel Marcus, Tor Raubenheimer
SLAC National Accelerator Laboratory, USA

XOPT10-3 17:00-17:15

Overcoming the Limits of Mirror Performance at LCLS

Corey Hardin, Venkat Srinivasan, Nicholas Kelez, Daniel Morton, Peter Stefan, Josep Nicolas, Lin Zhang, Daniele Cocco
SLAC National Accelerator Laboratory, USA

XOPT10-4 17:15-17:30

KB Mirror Design for the LCLS-II SXR Beam Line

Daniel Morton, Daniele Cocco, Nicholas Kelez, Lin Zhang
Linac Coherent Light Source, SLAC National Accelerator Laboratory, USA

XOPT10-5 17:30-17:45

Studies of diamond endurance to irradiation with x-ray beams of multi kW/mm^2 power densities for XFELO application

Tomasz Kolodziej[1], Kwang-Je Kim[1], Deming Shu[1], Steven Kearney[1], Stanislav Stoupin[1], Wenjun Liu[1], Thomas Gog[1], Paulo Rigg[2], Donald Walko[1], Jin Wang[1], Ayman Said[1], Wenge Yang[3], Maria Baldini[3], Vladimir Blank[4], Sergey Terentyev[4], Yuri Shvyd'ko[1]
[1]Argonne National Laboratory, Advanced Photon Source, USA, [2]Dynamic Compression Sector, Washington State University, USA, [3]HPSynC, Advanced Photon Source, USA, [4]Technological Institute for Superhard and Novel Carbon Materials, Russia

[Closing] 17:45-18:00
Closing Remarks
Tetsuya Ishikawa
RIKEN SPring-8 Center, Japan