The 5th Advanced Lasers and Photon Sources Conference

ALPS'16

Tuesday, May 17

8:55-9:00

Opening Address

Room 302

H. Yoneda, Conference Chair
Inst. for Laser Sci., Univ. Electro-Comm., Japan

9:00-10:30

ALPS1 : Frequency comb generation

Room 302

Chair: M. Yan Max-Planck-Inst. Quantenoptik, Germany

ALPS1-1 9:00 **(Invited) GHz fiber laser technology and 30 GHz astro-comb**
Z. Zhang, Y. Ma, C. Li, and A. Wang
State Key Lab. of Adv. Optical Comm. System and Networks, School of Electronics Eng. and Computer Sci., Peking Univ., China

ALPS1-2 9:30 **Fully Monolithic Mode-Locked Laser Frequency Comb**
W. Xie[1], C.-C. Lee[1], T. Shoji[1], S. Todaro[1], K. L. Silverman[2], A. Feldman[2], T. Harvey[2], R. P. Mirin[2], and T. R. Schibli[1,3,4]
[1]Dept. of Phys., Univ. of Colorado at Boulder, USA, [2]NIST, USA, [3]Dept. of Electrical, Computer and Energy Eng. Univ. of Colorado, USA, [4]JILA, NIST and Univ. of Colorado, USA

ALPS1-3 9:45 **Effects with Kerr comb in silica toroid microcavity: Raman scattering and third harmonic generation**
R. Suzuki, T. Kato, A. Chen-Jinnai, T. Kobatake, S. Fujii and T. Tanabe
Keio Univ., Japan

ALPS1-4 10:00 **Tunable mid-infrared optical frequency comb based on supercontinuum at 1 μm wavelength range**
L. Jin[1], M. Yamanaka[1], V. Sonnenschein[1], H. Tomita[1], T. Iguchi[1], A. Sato[2], A. Omori[2], A. Ideno[2], T. Oh-hara[2], N. Nishizawa[1]
[1]Nagoya Univ., Japan, [2]Sekisui Medical Co. Ltd. Japan

ALPS1-5 10:15 **Mode filtering of fiber-based optical frequency comb by use of Fabry-Perot cavities and its application**
S. Yoshida[1,2], A. Nishiyama[1,2,3], A. Asahara[1,2], Y. Nakajima[1,2], K. Minoshima[1,2]
[1]Univ. Electro-Comm., Japan, [2]JST, ERATO IOS Project, Japan, [3]JSPS, Japan

---- Break (10:30-10:45)-----

10:45-12:00

ALPS2 : Applications of optical frequency comb

Room 302

Chair: Z. Zhang Peking Univ., China

ALPS2-1 10:45 **(Invited) Laser frequency combs for new approaches to molecular spectroscopy**
M. Yan[1,2], T. W. Hänsch[1,2], N. Picqué[1, 2]
[1]Max-Planck-Institut für Quantenoptik, Germany, [2]Ludwig-Maximilians-Universität München, Fakultät fur Physik, Germany

ALPS2-2 11:15 **Time-Domain Measurements for Characterization of Solids by Dual-Comb Spectroscopy and Asynchronous Optical Sampling**
A. Asahara[1,2], A. Nishiyama[1,2,3], S. Yoshida[1,2], K. Kondo[1], Y. Nakajima[1,2], and K. Minoshima[1,2]
[1]Univ. Electro-Comm., Japan, [2]ERATO IOS Project, Japan, [3]JSPS, Japan

ALPS2-3 11:30 **Frequency comb two-color interferometry for self-correction of refractive index of air beyond accuracy of empirical equation**
K. Miyano[1,2], G. Wu[3], T. Makino[1], Y. Nakajima[1,2], K. Minoshima[1,2]
[1]Univ. Electro-Comm., Japan, [2]JST, ERATO IOS, Japan, [3]Tsinghua Univ., China.

ALPS2-4 11:45 **Spectral interferometric imaging with chirped frequency comb for non-scanning three-dimensional measurement**
T. Kato[1,2], M. Uchida[1], K. Minoshima[1,2]
[1]Univ. Electro-Comm., Japan, [2]JST, ERATO IOS. project, Japan

11:00-12:00

ALPS3 : Ultrafast technologies

Room 511+512

Chair: A. Pirozhkov QST, Japan

ALPS3-1 11:00 **(Invited) Laser-Plasma-Based Secondary Sources: Accelerating Particles and Light**
C. Spielmann[1,2]
[1]Inst.of Optics and Quantum Electronics, Abbe Center of Photonics, Jena Univ., Germany, [2]Helmholtz Inst. Jena, Germany

ALPS3-2 11:30 **Suppression of Gain Narrowing in Ti:Sapphire by Polarization Encoded Chirped Pulse Amplification**
M. Kalashnikov[1,2], H. Cao[2], K. Osvay[2], V. Chvykov[2], N. Khodakovskiy[1], R. S. Nagymihaly[2]
[1]Max-Born-Inst. for Nonlinear Optics and Short Pulse Spectroscopy, Germany, [2]ELI-Hu Nkft., Hungary

ALPS3-3 11:45 **Ti:sapphire Laser Pumped by Wavelength Multiplexed 521/478-nm InGaN Diode Lasers**
R. Sawada, H. Tanaka, F. Kannari
Keio Univ., Japan

----- Lunch Break (12:00-13:00)-----

13:00-15:00

ALPS4 : Fiber-based novel sources

Room 302

Chair: T. Schibli, Program Committee Member
Univ. of Colorado, USA

Chair: S. Matsushita, Program Committee Member
Furukawa Electric Co., Ltd., Japan

ALPS4-1 13:00 **(Invited) Higher-Order Mode Fiber Lasers**
J. W. Nicholson, R. Ahmad, K. Abedin1 A. DeSantolo, P. S. Westbrook, R.S. Windeler, C. Headley, and D. J. DiGiovanni
OFS Laboratories, USA

ALPS4-2 13:30 **Coherent, broadband supercontinuum Optical Frequency 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]Univ. of Tokyo, Japan

ALPS4-3 13:45 **Fully and high-quality phase stabilized high-repetition-rate optical frequency comb based on a mode-locked Yb:fiber laser**
H. Yasui[1,2], B. Xu[1,2], Y. Nakajima[1,2], Y. Ma[3], Z. Zhang[3], K. Minoshima[1,2]
[1]Univ. Electro-Comm., Japan, [2]Univ. Electro-Comm., ERATO IOS Project, Japan, [3]Peking Univ., China

ALPS4-4 14:00 **Mid-infrared comb generation at 3 μm through DFG using high repetition rate Er-doped fiber laser with SWNT**
M. Tsuzuki[1], Y. Nomura[1], L. Jin[1], M. Yamanaka[1], V. Sonnenchein[1], H. Tomita[1], T. Iguchi[1], A. Sato[2], A. Omori[2], A. Ideno[2], T. Ohara[2] , Y. Sakakibara[3], E. Omoda[3], H. Kataura[3], Y. Sakakibara[3], and N. Nishizawa[1]
[1]Dept. of Quantum Eng., Nagoya Univ., Japan,[2] Sekisui Medical Co. Ltd, Japan, [3]AIST, Japan

ALPS4-5 14:15 **High power supercontinuum generation with Gaussian-like spectral shape in 2100 nm spectral band for optical coherence tomography**
T. Sato, H. Kawagoe, M. Yamanaka, N. Nishizawa
Nagoya Univ., Japan

ALPS4-6 14:30 **Tunable SESAM mode-locked Tm fiber laser at the wavelength range of two micron**
Y. Mashiko, E. Fujita, M. Tokurakawa
Inst. for Laser Sci., Univ. Electro-Comm., Japan

ALPS4-7 14:45 **Femtosecond Er-Doped Fiber Laser Mode-Locked by Hybrid Scheme of Nonlinear Polarization Rotation and Single-Wall Carbon Nanotube**
L. Jin, K. Nonobe, N. Nishizawa
Dept. Quantum Eng., Nagoya Univ., Japan

13:00-15:00

ALPS5 : Petawatt and high power lasers

Room 511+512

Chair: H. Yoneda, Conference Chair
Inst. for Laser Sci., Univ. Electro-Comm., Japan

Chair: C. Spielmann
Inst. of Optics and Quantum Electronics、Germany

ALPS5-1 13:00 **(Invited) Next generation Petawatt Laser Systems**
C. L. Haefner, C.W. Siders, A. Bayramian, T. Spinka, J. Atherton, S. Baxamusa, S. Betts, D.R. Bopp, B. Demaret, B. Deri, J.M. Di Nicola, R. Dylla-Spears, C. Gates, A. Erlandson, J. Jarboe, B. Heidl, J. Horner, D. Kim, E. Koh, G. Korn*, J. Lusk, C. Marshall, D. Mason, J. Menapace, P. Miller, B. Rus, K. Schaffers, L. Seppala, D.E. Smith, J. Stanley, T. Suratwala, S. Telford, D. VanBlarcom
NIF Photon Science, Lawrence Livermore National Laboratory, USA

ALPS5-2 13:30 **PENELOPE laser system update - on the way to first light**
D. Albach[1], M. Siebold[1], M. Loeser[1,2], F. Roeser[1], P. Eiselt[1,2] and U. Schramm[1,2]
[1]Helmholtz-Zentrum Dresden-Rossendorf, Germany[2], Tech. Univ. Dresden, Germany

ALPS5-3 13:45 **Meter-size Gratings for Multi-Petawatt Lasers**
A. Cotel, and B. Villier
HORIBA Jobin Yvon SAS, France

ALPS5-4 14:00 **The development of ozone grating for high energy lasers**
Y. Michine, H. Yoneda
Inst. for Laser Sci., Univ. Electro-Comm., Japan

ALPS5-5 14:15 **Spectral control of x-ray atomic laser pumped with intense XFEL pulses**
T. Masutani[1], Y. Michine[1], T. Suzuki[1], Y. Inubushi[2], M. Yabashi[2], and H. Yoneda[1]
[1]Inst. for Laser Sci., Univ. Electro-Comm., Japan, [2]RIKEN XFEL, Japan

ALPS5-6 14:30 **Development of high rep. rate 100-J class diode-pumped solid-state laser system**
Y. Takeuchi, T. Sekine, Y. Hatano, T. Kurita, Y. Muramatsu, Y. Kato, N. Sato, and T. Kawashima
Industries Development Lab., Hamamatsu Photonics K.K., Japan

ALPS5-7 14:45 **Discharge-pumped Non-chain HF/DF Lasers with Joule Output**
L. You, X. Fang, X. Liang, Q. Wang, G. Yin
Anhui Inst. of Optics and Fine Mechanics, Chinese Academy of Sci., China

----- Break (15:00-15:30) -----

15:30-17:30

ALPS6 : Fiber lasers and laser diodes

Room 302

Chair: J. W. Nicholson, Program Committee Member
OFS Laboratories, USA

ALPS6-1 15:30 **(Invited) Scaling ultrafast fiber source performances: coherent combining of femtosecond pulses**
F. Guichard[1], M. Hanna[2], Y. Zaouter[1], F. Druon[2], C. Hönninger[1], E. Mottay[1], and P. Georges[2]
[1]Amplitude Systèmes, France, [2]Lab. Charles Fabry, Inst. d'Optique, CNRS, Univ. Paris-Sud, France

ALPS6-2 16:00 **Divided Pulse Amplification: Spectral Phase and Combining Efficiency**
K. Iwata, H. Tünnermann, A. Shirakawa
Inst. for Laser Sci., Univ. Electro-Comm., Japan

ALPS6-3 16:15 **Phase-locked 7-core multi-core photonic crystal fiber laser**
Y. Kurosu[1], T. Kubouchi[1], H. Tünnermann[1], A. Shirakawa[1], K. Saito[2]
[1]Inst. for Laser Sci., Univ. Electro-Comm., Japan, [2]Toyota Tech. Inst., Grad. School of Eng., Japan

ALPS6-4 16:30 **Experimentally fabrication of a monolithic fiber end cap collimator with long collimation length for high power applications**
X. Zhou, Z. Chen, Z. Wang, J. Hou, X. Xu
College of Optoelectric Sci. and Eng., National Univ. of Defense Tech., China

ALPS6-5 16:45 **Generation of red Q-switch pulse laser in Pr-doped double-clad structured waterproof fluoride glass fiber with graphene thin film**
S. Kajikawa[1,2,] T. Terao[1,2], S. Motokoshi[3], M. Yoshida[1], O. Ishii[4], M. Yamazaki[5], Y. Fujimoto[2]
[1]Faculty of Sci. and Eng. Kindai Univ., Japan, [2]ILE, Osaka Univ., Japan, [3]Inst. of Laser Tech., [4]Production Eng. Section, Optical Glass Production Dept. Sumita Optical Glass, Inc., Japan, [5]Glass Res. Division, R&D Dept. Sumita Optical Glass, Inc., Japan

ALPS6-6 17:00 **976nm 300W Fiber Coupled Laser Diode Module**
E. Katayama, Y. Ishige, Y. Ohki, H. Mori, T. Kimura, T. Mukaihara
Furukawa Electric Co., Ltd., Japan

ALPS6-7 17:15 **Wavelength locking and bandwidth narrowing for spatial beam-combined high-power laser-diode stacks using single volume Bragg grating**
T. Sekine, Y. Zheng, H. Kan, N. Satoh, and T. Kawashima
Hamamatsu Photonics K.K., Japan

15:30-17:30

ALPS7 : Ultrafast light sources

Room 511+512

Chair: A. Suda Tokyo Univ. of Sci., Japan
Chair: B. E. Schmidt Few-cycle Inc., Canada

ALPS7-1 15:30 **(Invited) Concepts for scaling peak power and average power via Frequency domain OPA (FOPA)**
M. Giguere[1], G. Ernotte[2], P. Lassonde[2], A. Stephanides[3], T. Mans[3], F. Légaré[2], B. E. Schmidt[1]
[1]Few-cycle Inc., Canada, [2]NRS-EMT, Canada, [3]AMPHOS GmbH, Germany

ALPS7-2 16:00 **Sub-Two-Cycle, Millijoule IR Light Source for Attosecond Streaking of Extreme Ultraviolet High Harmonics**
N. Ishii[1], N. Saito T. Kanai[1], S. Watanabe[2], and J. Itatani
[1]The Inst. for Solid State Phys., Japan, [2]Tokyo Univ. of Sci., Japan

ALPS7-3 16:15 **Retrieval of Vacuum-Ultraviolet Waveform and Plasma Mirror Reflectivity Using Frequency-Resolved Optical Gating**
R. Itakura, T. Kumada, M. Nakano, H. Akagi
Kansai Photon Sci. Inst., JAEA, Japan

ALPS7-4 16:30 **Chirped-Pulse Amplification Using Thulium-Doped Fluoride Fibers**
Y. Nomura and T. Fuji
Inst. for Molecular Sci., Japan

ALPS7-5 16:45 **Ultrashort 34 fs, 50 μJ fiber source through nonlinear compression in hypocycloid core Kagome fiber**
F. Guichard[1], L. Lavenu[1,2], Y. Zaouter[1], M. Hanna[2], Q. Mocaer[1], G. Machinet[1], B. Debord[3], F. Gerome[3,4], C. Hönninger[1], E. Mottay[1], F. Benabid[3,4], and P. Georges[2]
[1]Amplitude Systèmes, France, [2]Lab. Charles Fabry, France, [3]GPPM group laboratoire XLIM, GLOphotonics, France

ALPS7-6 17:00 **Synchronization of Two-Color Femtosecond Fiber Chirped-Pulse Amplifiers by Use of Dispersive-Wave Generation**
D. Yoshitomi and K. Torizuka
AIST, Japan

ALPS7-7 17:15 **Measurement of time-dependent plasma formation in noncollinear high harmonic generation**
M. Kohga, K. Sato, T. Kuroda, M. Hata, and A. Suda
Dept. of Phys. Faculty of Sci. and Tech., Tokyo Univ. of Sci., Japan

Wednesday, May 18

9:00-12:10 OPIC Plenary Session

Room 501+502

----- Lunch （12:10-13:30）-----

13:30-15:30
ALPS, HEDS, XOPT Joint Session 1

Room 302

Chair: M. Yabashi SPring-8/SACLA, Japan
T. Hosokai Osaka Univ., Japan

XOPTj-1 13:30 **(Invited) X-rays as a Subject for Optics Research**
T. Ishikawa
RIKEN SPring-8 Center, Japan

XOPTj-2 14:00 **(Invited) LCLS-II: A high repetition rate x-ray laser facility**
D. M. Fritz
SLAC National Accelerator Laboratory, USA

HEDSj-1 14:30 **(Invited) Exploration of New Fields on High Energy Density Science**
R. Kodama
Inst. of Laser Eng., Osaka Univ., Japan
Photon Pioneers Center, Osaka Univ., Japan
Grad. School of Eng., Osaka Univ., Japan

ALPSj-1 15:00 **(Invited) HiLASE100: a cryo-cooled 100 J, 10 Hz DPSSL System**
A. Lucianetti, M. Divoký, J. Pilaś O. Slezák, M. Sawicka-Chyla, V. Jambunathan, P. Navrátil, M. Hanuš, M. Boehm, M. Lukaszewski, and T. Mocek
HiLASE Centre, Inst. of Phys., CAS, Czech Republic

13:30-15:30
ALPS8 : Novel structured lasers/nonlinear media

Room 511+512

Chair: S. Kurimura, Program Committee Member
National Inst. for Materials Sci., Japan

ALPS8-1 13:30 **(Invited) Optical parametric vortex lasers and their applications towards chiral materials science**
T. Omatsu
Chiba Univ., Japan

ALPS8-2 14:00 **High-Power 355-nm UV Generation in Prism-Coupled $CsLiB_6O_{10}$**
M. Yoshimura[1], K. Ueda[1], Y. Orii[2], Y. Takahashi[1], G. Okada[2], and Y. Mori[1]
[1]Osaka Univ., Japan, [2]Spectronix Corp., Japan

ALPS8-3 14:15 **Evaluation of the thermally induced birefringence in a Nd:YAG/diamond composite laser fabricated with the room-temperature bonding**
K. Yamaguchi, Y. Okuyama, H. Ichikawa, and I. Shoji
Chuo Univ., Japan

ALPS8-4 14:30 **(Invited) Photonic quantum devices using single light emitters**
H. Takashima[1-3], A. W. Schell[1], A. Fukuda[1], S. Fujita[1], Y. Oe[1-3], S. Kamioka[2, 3], M. Fujiwara[2, 3], S. Takeuchi[1-3]
[1]Grad. School of Eng., Kyoto Univ., Japan, [2]Res. Inst. for Electronic Sci., Hokkaido Univ., Japan, [3]The Inst. of Scientific and Industrial Res., Osaka Univ., Japan

ALPS8-5 15:00 **750-nm LED-pumped Nd:YAG laser with 9% optical efficiency**
K.-Y. Huang, C.-K. Su, M.-W. Lin, Y.-C. Chiu, Y.-C. Huang
National Tsing Hua Univ., Taiwan

ALPS8-6 15:15 **Illusion Medium Mimicking Scattered Waves of a Bump on a Flat Surface Based on Transformation Electromagnetics**
T. Nagayama, A. Sanada
Yamaguchi Univ., Japan

----- Break (15:30-15:45)-----

15:45-16:45
ALPS, HEDS, XOPT Joint Session 2

Room 302

Chair: J. Itatani, Program Committee Member
Univ. Tokyo, Japan

ALPSj-2 15:45 **(Invited) Current status of PW laser at CoReLS and applications**
S. K. Lee[1, 2], J. H. Sung[1,2], H. W. Lee[1], J. Y. Yoo[1], and C. H. Nam[1,3]
[1]Center for Relativistic Laser Science, Institute for Basic Science, Korea
[2]Ultraintense Laser Laboratory, Advanced Photonics Research Institute, GIST, Korea
[3]Department of Physics and Photon Science, GIST, Korea

HEDSj-2 16:15 **(Invited) High-energy density science and plasma physics at ELI-Beamlines**
G. Korn[1], S. Weber[1]
[1]ELI-Beamlines, Institute of Physics, Academy of

15:45-17:15
ALPS9 : Metamaterials, Photon handling

Room 511+512

Chair: T. Tanabe, Program Committee Member
Keio Univ., Japan

ALPS9-1 15:45 **(Invited) Spin-orbit interaction in optical metamaterials**
J. W. Wu
Ewha Womans Univ., Korea

ALPS9-2 16:15 **(Invited) Terahertz Component Platforms Inspired by Metamaterials**
T. Suzuki
Ibaraki Univ., Japan

Sciences of the Czech Republic,

ALPS9-3 16:45 **Bio-inspired, nanostructured anti-reflective surfaces for laser applications**
Z. Diao1, J.-H. Dirks[1,2], J. P. Spatz[1,3]
[1]Dept. of New Mater. and Biosystems, Max Planck Inst. for Intelligent Systems, Germany, [2]Dept. for Biomimetics, Hochschule Bremen-Univ. of Applied Sci., Germany, [3]Dept. of Biophysical Chemistry, Univ. of Heidelberg, Germany

ALPS9-4 17:00 **Low Loss Asymmetrical Optical Power Splitter on SOI Platform with Various Influenced Parameters**
C. P. Vardhani, N. Pendam
Osmania Univ., India

----- Break / Move (1700 -18:00)-----

18:00 - 20:00 OPIC Reception

Room 501+502

Thursday, May 19

9:00-10:30
ALPS10 :High power lasers

Room 302

Chair: J. Kawanaka, Program Committee Member
Osaka Univ., Japan

ALPS10-1 9:00 **(Invited) Diode-pumped amplification of broad band pulses to more than 50 J**
J. Hein[1,2], M. Hornung[1,2], S. Keppler[1], H. Liebetrau[2], M. Hellwing[1], A. Kessler[2], F. Schorcht[2], J. Körner[1], M. C. Kaluza[1,2]
[1]Inst. of Optics and Quantum Electronics, Friedrich-Schiller-Univ., Germany,
[2]Helmholtz-Institute Jena, Germany

ALPS10-2 9:30 **High energy regenerative amplifier based on Yb:CaF_2**
J.-G. Brisset[1,2], P. Sevillano[3], A. Courjaud[3]
[1]Max Born Inst., Germany, [2]Univ. de Genéve, GAP-Biophotonics, Switzerland, [3]Amplitude Systémes, France

ALPS10-3 9:45 **Development of a High-Energy, Compact Power Laser System Using Diode-Pumped Solid-State Laser Technologies**
Y. Kato[1,3], T. Kurita[1,3], T. Morita[1,3], T. Sekine[1,3], Y. Tamaoki[1,3], Y. Takeuchi[1,3], M. Miyamoto[2], T. Fujita[2], D. Hori[2], M. Takauji[2], T. Kokubo[2], T. Nagakura[2], H. Suzuki[2], and T. Kawashima[1,3]
[1]Hamamatsu Photonics K.K., Development Bureau, Industries Development Lab., Japan, [2]Miyakoda Factory, Japan, [3]ImPACT Program, Japan

ALPS10-4 10:00 **Recent Progress of the Development of the 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. Ahn[1], H. Lee[1], J. Oh[1], J. S. Kim[2]
[1]KAIST, Korea, [2]Laser Spectronix, Korea

ALPS10-5 10:15 **Exploring the optimal temperature for the cryogenic 946-nm Nd:YAG laser**
C.-Y. Cho, H. P. Cheng, and Y.-F. Chen, Dept. of Electrophysics, National Chiao Tung Univ., Taiwan

9:00-10:30
ALPS11 : Biomedical imaging and applications

Room 511+512

Chair: N. Nishizawa, Program Committee Chair
Nagoya Univ., Japan

ALPS11-1 9:00 **(Invited) Progress of high-speed optical coherence tomography**
M. Ohmi
Osaka Univ., Japan

ALPS11-2 9:30 **Optical coherence microscopy in 1700 nm spectral band for deep and 3D high-resolution imaging of biological samples**
T. Teranishi, M. Yamanaka, H. Kawagoe, N. Nishizawa
Dept. quantum Eng. Nagoya Univ. Japan

ALPS11-3 9:45 **Scaling in Frame Number of Single-shot Ultrafast 2D-burst Imaging by STAMP utilizing Spectral Filtering**
T. Suzuki, R. Hida, R. Ueda, F. Isa, and F. Kannari
Keio Univ., Japan

ALPS11-4 10:00 **Single-Shot Multispectral Imaging by SF-STAMP System Using a Supercontinuum Pulse**
R. Hida, T. Suzuki, R. Ueda, F. Isa, and F. Kannari
Keio Univ., Japan

ALPS11-5 10:15 **Ablation property of demineralized dentin by nanosecond pulsed laser irradiation at wavelengths around 3 μm**
K. Shimizu[1], K. Ishii[1], K. Hashimura[1,2], K. Yoshikawa[3], K. Yasuo[3], K. Yamamoto[3], K. Awazu[1,4,5]
[1]Grad. School of Eng., Osaka Univ., Japan, [2]Res. Fellow of JSPS, Japan, [3]Dept. of Operative Dentistry Dental Univ., Japan, [4]Grad. School of Frontier Biosciences, Osaka Univ., Japan, [5]Global Center for

Medical Eng. and Informatics, Osaka Univ., Japan

----- Break (10:30-11:00)-----

11:00-12:00
ALPS12 : Photonic lasers and applications
Room 302

Chair: J. Hein
Friedrich schiller Univ. Jena, Germany

ALPS12-1 11:00 **(Invited) High-Light-Extraction Nanophotonic Structure for High-power DUV-LEDs**
S.-I. Inoue
Adv. ICT Res. Inst., National Inst. of Information and Comm. Tech. (NICT), Japan

ALPS12-2 11:30 **Nanosecond pulsed operation of a PCSEL for high peak powers**
H. Nishida[1], X. Guo[1,2], S. Tokita[1], K. Ishizaki[2], S. Noda[2], K. Hirose[3], T. Sugiyama[3], A. Watanabe[3], J. Kawanaka[1]
[1]ILE, Osaka Univ., Japan, [2]Dept. of Electronic Sci. and Eng. Kyoto Univ., Japan, [3]Industries Development Lab. Hamamatsu Photonics K.K., Japan

ALPS12-3 11:45 **Photonic Crystal Surface Emitting Laser Direct-Pumped Cryogenically Cooled Yb:YAG Oscillator**
X. Guo[1,3], S. Tokita[1], K. Hirose[2], T. Sugiyama[2], A. Watanabe[2], K. Ishizaki[3], S. Noda[3], J. Kawanaka[1]
[1]Osaka Univ., Japan, [2]Hamamatsu Photonics K.K, Japan, [3]Kyoto Univ., Japan

11:00-12:00
ALPS13 : Biomedical spectroscopy
Room 511+512

Chair: M. Ohmi, Program Committee Member
Osaka Univ., Japan

ALPS13-1 11:00 **(Invited) Hollow optical fiber probe for Raman spectroscopy**
T. Katagiri[1], Y. Matsuura[2]
[1]Dept. of Eng., Tohoku Univ., Japan, [2]Dept. of Biomedical Eng., Tohoku Univ., Japan

ALPS13-2 11:30 **Temperature determination at the nanoscale via tip-enhanced THz-Raman spectroscopy**
M. V. Balois[1], N. Hayazawa[1,2], F. C. Catalan[2], S. Kawata[3], T. Tanaka[1], T. Yano[4], T. Hayashi[4]
[1]Innovative Photon Manipulation Res. Team-RIKEN, Japan, [2]Surface and Interface Sci. Lab.-RIKEN, Japan, [3] Osaka Univ., Japan, [4]Tokyo Inst. of Tech., Japan

ALPS13-3 11:45 **Femtosecond Mid-Infrared Spectrometer Using Chirped-Pulse Upconversion in a Wide-Bandgap Nonlinear Crystal**
Y. Inagaki[1,2], H. Hata[1,2], T. Kamimura[2], N. Umemura[3], N. Hamada[1], R. Nakamura[1]
[1]Osaka Univ., Japan, [2]Osaka Inst. Tech., Japan, [3]Chitose Inst. Sci. Tech., Japan

----- Lunch Break (12:00-13:00)-----

13:00-15:00
ALPSp14: Poster Session — Exhibition Hall A

ALPSp14-01 **The Effects on the Microstructures and Photoluminescence Properties of the IGZO Films in Various Sputtering Angles**
T-C Li, J.-F. Lin
National Cheng Kung Univ., Taiwan

ALPSp14-02 **Mutual Influence of Silica Oxide and Calcium Oxide on Transparency of Cr^{4+}:YAG Ceramics**
M. Chaika, O. Vovk, N. Dulina, A. Doroshenko, S. Parkhomenko, A. Tolmachev
Inst. for Single Crystals of National Academy of Sci. of Ukraine, Ukraine

ALPSp14-03 **p-i-n Integrated Photonic Crystal Nanocavity Optical Functional Device**
N. Ashikin B. Daud[1], Y. Ooka[2], T. Tanabe[3]
Faculty of Sci. and Tech., Keio Univ., Japan

ALPSp14-04 **Ultrafast Plasmon Source Combined with a Dual-probe Scanning Near-filed Optical Microscopy for Ultrafast Spatiotemporal Nano-photonics**
Y. Kojima, Y. Masaki, F. Kannari
Keio Univ., Japan

ALPSp14-05 **Fabrication of Pr:ZBLAN Waveguides for Laser Using Refractive Index Change Induced by Ultra-fast Laser Pulses**
T. Sato, Y. Yamanaka, and F. Kannari
Keio Univ., Japan

ALPSp14-06 **Bismuth-Based Rational Harmonic Mode-Locked Short-Cavity Fiber Laser**
Y. Fukuchi, T. Matsuura, A. Enda, H. Shirane, S. Takai
Tokyo Univ. of Sci., Japan

ALPSp14-07 **(Withdraw)**

ALPSp14-08 **Optical Waveform Generation in a Figure-Eight SOA-Based Fiber Laser**
L.-T. Gao, J.-Y. Wang, W.-H. Kuan, and K.-H. Lin
Univ. of Taipei, Taiwan

ALPSp14-09 **Reflectivity of the Rotating Wedge Stimulated Brillouin Scattering Phase Conjugate Mirrors (SBS-PCMs) for High Power Laser**
J. Oh, S. Cha, S. Park, and H. J. Kong
KAIST, Korea

ALPSp14-10 **Development of a longitudinally excited CO_2 laser using fast high-voltage solid state switch**
M. Tanaka[1], M. Tei[1], K. Uno[2], M. Tsuyama[1], H. Nakano[1]

[1]Kindai Univ., Japan, [2]Univ. of Yamanashi, Japan

ALPSp14-11 **Pr^{3+}:YLF Visible Lasers Directly Pumped by InGaN Diode Lasers**
K. Iijima, R. Kariyama, H. Tanaka, Y. Kiyota, F. Kannari
Keio Univ., Japan

ALPSp14-12 **Analysis of fluorescence properties for exciting in Cr^{3+} $^4T_1$ level of Nd/Cr:YAG ceramics**
T. Yamada[1], Y. Honda[2], S. Motokoshi[3], T. Jitsuno[2], J. Kawanaka[2], K. fujioka[2], M. Yoshida[1]
[1]Kinki Univ., Japan, [2]ILE Osaka Univ., Japan, [3]ILT, Japan

ALPSp14-13 **Recyclable metal air cell using sintered Si pastes with reduced Si nanoparticles by pulse laser ablation in liquids**
T. Saiki, K. Nakamura, S. Nakata, K. Nakamura, T. Uematsu, S. Masuda
Dept. of Electrical and Electronic Eng., Faculty of Eng. Sci., Kansai Univ., Japan

ALPSp14-14 **Fabrication of Core Inductor Using Sintered Aluminum Nano-paste with Aluminum Nano-polycrystalline structure**
T. Saiki, Y. Iida, S. Masuda
Dept. of Electrical and Electronic Eng. Faculty of Eng. Sci., Kansai Univ., Japan

ALPSp14-15 **A monolithic 0.8 to 4.5 μm supercontinuum source with a low-loss fusion spliced joint between silica and fluoride fibers**
K. Yin, B. Zhang, J. Yao, Z. Chen, S. Chen, and J. Hou
College of Optoelectronic Sci. and Eng., National Univ. of Defense Tech., China

ALPSp14-16 **Influence of pulse delay time on material processing by double pulses of femtosecond lasers**
T. Sugihara[1], S. Kubodera[1], M. Kaku[1], A. Yokotani[1], M. Katto[1,2]
[1]Grad. School of Eng., Univ. of Miyazaki, Japan, [2] CRCC, Univ. of Miyazaki, Japan

ALPSp14-17 **Development of Self-Q-switched and Mode-locked Nd/Cr:YAG Ceramic Pulse Laser Using Cr^{4+}:YAG Crystal**
S. KanemoriI, N. Hirota, T. Saiki
Dept. of Electrical and Electronic Eng. Faculty of Eng. Sci., Kansai Univ., Japan

ALPSp14-18 **Nanoablation on Si Induced by Surface Plasmon Polaritons with an Intense Femtosecond Laser Pulse**
M. Hagiya and G. Miyaji
Dept. of Applied Phys., Tokyo Univ. of Agriculture and Tech., Japan

ALPSp14-19 **(Withdraw)**

ALPSp14-20 **Characteristics of Laser Microphone using Self-coupling Effect of the Semiconductor Laser**
D. Mizushima, N. Tsuda, and J. Yamada
Aichi Inst. of Tech., Japan

ALPSp14-21 **Development of laser distance sensor by utilizing fluctuation of terminal voltage due to self-coupling effect**
T. Yoshimatsu, K. Goshima, M. Aoki, N. Tsuda , and J. Yamada
Aichi Inst. of Tech., Japan

ALPSp14-22 **Study on Simultaneous Measurement of Thickness and Speed of Object using Semiconductor Laser**
T. Michihiro, N. Tsuda, and J. Yamada
Aichi Inst. of Tech., Japan

ALPSp14-23 **(Withdraw)**

ALPSp14-24 **High power narrow-linewidth linearly-polarized 1610 nm Er:Yb all-fiber MOPA**
E. Fujita, Y. Mashiko, and M. Tokurakawa
Inst. for Laser Sci., Univ. of Electro-Comm., Japan

ALPSp14-25 **(Withdraw)**

ALPSp14-26 **Repetition-rate-tunable Yb-doped Fiber Chirped Pulse Amplifier Toward Waveguide Direct Writing in Transparent Materials**
H. Tanaka, K. Hirosawa, F. Kannari
Dept. of Electronics and Electrical Eng., Keio Univ., Japan

ALPSp14-27 **Electron Acceleration by Laser Driven Beat Wave Excited by Cross-Focused q-Gaussian Laser Beams in Thermal Quantum Plasma with Nonlinear Absorption**
N. Gupta and A. Singh
National Inst. of Tech. Jalandhar, India

ALPSp14-28 **Photon-stimulated desorption surface spectroscopy of polymers by VUV emissions from a laser-produced plasma**
M. Kaku[1], M. Katto[1], W. Sasaki[2], S. Kubodera[1]
[1]Dept. of Electrical and Systems Eng. Univ. of Miyazaki, Japan, [2]NTP Inc., Japan

ALPSp14-29 **High-efficient, high-pulse-energy Cr:ZnSe master oscillator power amplifier pumped with Tm:YAG laser**
M. Yumoto, N. Saito, and S. Wada
Photonics control tech. team, RIKEN, Japan

ALPSp14-30 **Nonlinear Dynamics in Radially Polarized Laser Beam with Pump Modulation**
C.-P. Chiu, X.-W. Jiang, K.-C. Chang, and M.-D. Wei
Dept. of Photonics, National Cheng Kung Univ., Taiwan

ALPSp14-31 **High efficient MLD-THz-TDS with super focusing effects and laser chaos**
Y. Akamine[1], K. Iwao[1], M. Oi[1], S. Goda[1], T. Shirasaki[1], N. Sakaue[1], T. Kishibata[1], F. Kuwashim[1], M. Tani[2], K. Yamamoto[2], K. Kurihara[3], K. Ngashima[4], M. Nakashima[5], M. Hangyo[5]
[1]Fukui Univ. of Tech., Japan, [2]Res. Center for Development of Far-Infrared Region, Japan, [3]Faculty of Education and Regional

Studies, Univ. of Fukui, Japan, [4]Setsunan Univ., Japan, [5]ILE Osaka Univ., Japan

ALPSp14-32 **All-waveguide Talbot Cavity Laser with Intra-cavity Second Harmonic Generation**
K. Hirosawa[1], F. Shohda[1], T. Yanagisawa[1], and F. Kannari[2]
[1]Mitsubishi Electric Co., Japan, [2]Keio Univ., Japan

ALPSp14-33 **Challenge to Excitation of the Low Frequency Collective Vibrational Mode in Proteins by using Intense Coherent Terahertz-Waves**
T. Notake, K. Nawata, Y. Takida, Y. Tokizane, Z. Han, M. Koyama and H. Minamide
RIKEN, Japan

ALPSp14-34 **Study on Parametric Gain of Nonlinear Wavelength Conversion in a $LiNbO_3$**
S. Hayashi[1,2], K. Nawata[1], H. Ishizuki[3], K. Murate[2], K. Imayama[2], Y. Takida[1], Y. Tokizane[1], T. Taira[3], K. Kawase[2,1], and H. Minamide[1]
[1]RIKEN Center for Adv. Photonics, Japan, [2]Nagoya Univ., Japan, [3]Inst. for Molecular Sci., Japan

ALPSp14-35 **Generation of tunable sub-THz wave from DAST-DFG by multi-wavelength pump beam**
T. Y. Tokizane, K. Nawata, Z. Han, M. Koyama, T. Notakake, Y. Takida and H. Minamide
RIKEN, Japan

ALPSp14-36 **Control of Two-photon Excited Fluorescence and Photobleaching with Two-dimensional LCOS-SLM**
N. Kamiyama, S. Maesako, K. Toda, and A. Suda
Tokyo Univ. Sci., Japan

ALPSp14-37 **Hollow optical-fiber probe for analysis of CO_2 gas**
T. Iida[1], T. Katagiri[2], Y. Matsuura[1]
[1]Grad. School of Biomedical Eng., Tohoku Univ., Japan, [2]Grad. School of Eng., Tohoku Univ., Japan

ALPSp14-38 **Breath analysis by ultraviolet gas spectroscopy using hollow-optical fiber as gas cell**
T. Iwata[1], T. Katagiri[2], Y. Matsuura[1]
[1]Grad. School of Biomedical Eng., Tohoku Univ., Japan, [2]Grad. School of Eng., Tohoku Univ., Japan

ALPSp14-39 **Spectroscopic gas analysis using hollow-optical fiber gas cell and infrared quantum cascade laser**
K. Yaegashi[2], T. Katagiri[1], Y. Matsuura[2]
[1]Grad. School of Eng., Tohoku Univ., Japan, [2]Grad. School of Biomedical Eng., Tohoku Univ., Japan

ALPSp14-40 **Ultrahigh speed time-domain en face optical coherence tomography using KTN optical beam deflector**
Y. Shinya1, T. Imai[2], S. Toyoda[2], J. Kobayashi[2], T. Sakamoto[2], and M. Ohmi[1]
[1]Osaka Univ., Japan, [2]NTT Co., Japan

ALPSp14-41 **Three dimensional imaging of diseased rat lung and liver using ultrahigh resolution optical coherence tomography**
M. Nanbu[1], Y. Ando[1], H. Kawagoe[1], M. Yamanaka[1], M. Matsushima[2], K. Mori[3], T. Kawabe[2], H. Shoji[4], and N. Nishizawa[1]
[1]Dept. Quantum Eng., Nagoya Univ., Japan, [2]Grad. School of Medicine, Nagoya Univ., Japan, [3]Grad. School of Information Sci., Nagoya Univ., Japan, [4]Dept. Medicine, Kyoto Prefectural Univ. of Medicine, Japan

ALPSp14-42 **Engineering the Photonic Band Gap for Simultaneous Multi-parametric Sensing**
R. Mudachathi[1], T. Tanaka[1-3], M. M. Varma[4,5]
[1]RIKEN Metamaterials Lab., Japan, [2]RIES, Hokkaido Univ., Japan, [3]Interdisciplinary Grad. School of Sci. and Eng., Tokyo inst. of Tech., Japan, [4]Center for Nano Sci. and Eng. Indian. [5]Inst. of Sci. Bangalore, India Dept. of ECE, Indian Inst. of Sci., India

ALPSp14-43 **Monitoring Microsecond Conformational Dynamics of Biomolecules Based on Realtime Detection of Fluorescence Photon Sequence**
K. Kitabayashi[1,2], T. Kamimura[2], N. Hamada[1], R. Nakamura[1]
[1]Osaka Univ., Japan, [2]Osaka Inst. Tech., Japan

ALPSp14-44 **High-power supercontinuum generation using 182-MHz soliton-similariton mode-locked fiber laser for ultrahigh-resolution optical coherence tomography in 1600 nm spectral band**
M. Yamanaka, H. Kawagoe, and N. Nishizawa
Nagoya Univ., Japan

ALPSp14-45 **Frequency Comb Source Using a Bismuth-Based Actively Mode-Locked Laser**
Y. Fukuchi, T. Matsuura, S. Takai, A. Enda, M. Yamamoto, H. Shirane
Tokyo Univ. of Sci., Japan

ALPSp14-46 **Experiment on Optical Phase Locking of Two Longitudinal Modes of a Dual-Mode Microchip Laser for Millimeter-Wave Signal Generation**
M. Hyodo[1], K. Sato[1], A. Kawakami[2], S. Saito[2], M.Watanabe[3], and M. Adachi[1]
[1]Faculty of Mechanical Eng., Kanazawa Univ., Japan, [2]Adv. ICT Res. Inst. National Inst. of Information and Comm. Tech., Japan, [3]Dept. of Eng. Sci., Univ. Electro-Comm., Japan

ALPSp14-47 **High-Precision Spectroscopy of Molecular Iodine Using an Ultra-Compact Laser at 561 nm**
K. Yoshii[1,2], Y. Hisai[1], and F.-Lei Hong[1,2]
[1]Dep. Physics, YNU, Japan, [2]JST-ERATO, Japan

ALPSp14-48 **All polarization-maintaining, fiber laser-based optical frequency comb using single wall carbon nanotube**
M. Togashi[1], G. Park[1], T. Nagaike[1], L. Jin[1], Y. Sakakibara[2], E. Omoda[2], H. Kataura[2], N. Nishizawa[1]
[1]Nagoya Univ., Japan, [2]AIST, Japan

ALPSp14-49 **Light generation enhancement by double resonance in metal-insulator-metal structure**
Soon-Hong Kwon
Dept.of Physics, Chung-Ang University, Korea

Friday, May 20

9:00-10:30

ALPS15 : Terahertz-wave sensing and devices

Room 416+417

Chair: J.-H. Son, Program Committee Member
Univ. of Seoul, Korea

ALPS15-1 9:00 **(Invited) Noninvasive THz Sensing of Critical Components in Human Blood**
C.-K. Sun[1] and T.-D. Wang[2]
[1]National Taiwan Univ., [2]Taiwan, National Taiwan Univ. Hospital, Taiwan

ALPS15-2 9:30 **Injection-Seeded Terahertz-Wave Parametric Generator at 77 K**
Y. Takida, K. Nawata, Y. Tokizane, Z. Han, M. Koyama, T. Notake, S. Hayashi, and H. Minamide
RIKEN, Japan

ALPS15-3 9:45 **Terahertz parametric amplification using $KTiOPO_4$**
M.-H. Wu[1], Y.-C. Chiu[1], T.-D. Wang[2], G. Zhao[3], A. Zukauskas[4], Y.-C. Huang[1], and F. Laurell[4]
[1]National Tsing Hua Univ., Taiwan, [2]CSIST Inc., Taiwan, [3]Peking Univ., China, [4]KTH Univ., Sweden

ALPS15-4 10:00 **Terahertz wave generation from cluster plasma produced by double pulse-laser beams**
K. Mori[1,2], M. Hashida[1,2], T. Nagashima[3], K. Teramoto[1,2], S. Inoue[1,2], and S. Sakabe[1,2]
[1]ICR, Kyoto Univ., Japan, [2]GSS, Kyoto Univ., Japan, [3]Setsunan Univ., Japan

ALPS15-5 10:15 **Analysis of propagation modes in THz-hollow optical fibers by time-domain spectroscopy**
K. Ito[1],T. Katagiri[2], and Y. Matsuura[1]
[1]Grad. School of Biomedical Eng., Tohoku Univ., Japan, [2]Grad. School of Eng., Tohoku Univ., Japan

----- Break (10:30-11:00)-----

11:00-12:00

ALPS16 : Terahertz-wave imaging

Room 416+417

Chair: C.-K. Sun, Program Committee Member
National Taiwan Univ.,Taiwan

ALPS16-1 11:00 **(Invited) Recent Advances in Terahertz Cancer Imaging**
J.-H. Son
Dept. of Phys., Univ. of Seoul, Korea

ALPS16-2 11:30 **THz spectroscopic imaging of concealed chemicals using is-TPG**
M. Kato[1], K. Murate[1], K. Imayama[1], S. R. Tripathi[1], K. Kawase[1, 2]
[1]Nagoya Univ., Japan, [2]RIKEN, Japan

ALPS16-3 11:45 **THz Frequency Combs generated from Off-axis THz Parametric Oscillator at Room Temperature**
Y,-C. Chiu[1], T.-D. Wang[2], P.-C. Wang[1], Y.-C. Huang[1]
[1]Inst. of Photonics Tech./Dept. of Electrical Eng., National Tsinghua Univ., Taiwan, [2]Chung-San Inst. of Sci. and Tech., Taiwan

----- Lunch Break (12:00-13:00)-----

13:00-15:00

ALPS17 : Intense lasers

Room 416+417

Chair: H. Minamide, Program Committee Member
RIKEN, Japan
Chair: H. Nishioka Univ. Electro-Comm., Japan

ALPS17-1 13:00 **KTA-Based Optical Parametric Amplifiers at 3.4-µm for Millijoule-Class Mid-Infrared Source**
F. M. Lu, T. Kanai, Y. Matsumoto, N. Ishiii, and J. Itatani
The inst. for Solid State Phys., The Univ. of Tokyo, Japan

ALPS17-2 13:15 **0.6-3.2 µm broadband supercontinuum generation in step-index Germania-core fiber**
K. Yin, B. Zhang, L. Yang, J. Yao, Z. Chen, and J. Hou
College of Optoelectronic Sci. and Eng., National Univ. of Defense Tech., China

ALPS17-3 13:30 **Photoionization mechanisms and high-efficiency pulsed Lyman-alpha generation by resonant laser wave mixing in low pressure Kr-Ar gas**
O. A. Louchev[1], N. Saito[1], Y. Oishi[3], K. Miyazaki[1], K. Okamura[1], J. Nakamura[3], M. Iwasaki[2], S. Wada[1]
[1]RIKEN Center for Adv. Photonics, Japan, [2]Adv. Meson Sci. Lab., RIKEN, Japan, [3]Muon Sci. Lab., KEK-IMSS, Japan

ALPS17-4 13:45 **High-efficiency LBO-based femtosecond optical parametric oscillator**
W. Tian[1,2], X. Meng[2], N. Zhang[1,2], Z. Wang[1], J. Zhu[2], and Z. Wei[1]
[1]Beijing National Lab. for Condensed Matter Phys. Inst. of Phys., Chinese Academy of Sci., China, [2]School of Phys. and Optoelectronic Eng., Xidian Univ., China

ALPS17-5 14:00 **Towards an intra-cavity pulse energy of 100 µJ in an ultrafast Kerr lens mode-locked thin-disk ring oscillator**
A. A. Eilanlou[1], Y. Nabekawa[1], M. K.-Gonokami[2,3], and K. Midorikawa[1,2]
[1]RIKEN Center for Adv. Photonics, Japan, [2]Inst. for Photon Sci. and Tech., The Univ. of Tokyo, Japan, [3]Grad. School of Sci., The Univ. of Tokyo, Japan

ALPS17-6 14:15 **(Invited) Toward compact and ultra-intense laser based soft x-ray lasers**
S. Sebban[1], A. Depresseux[1], E. Oliva[2], J. Gautier[1], F. Tissandier[1], J. Nejdl[3], M. Kozlova[3], G. Maynard[2], J.P. Goddet[1], A. Tafzi[1], A. Lifschitz[1], H. T. Kim[4], S. Jacquemot[5], V. Malka[1], K. Ta Phuoc[1], C. Thaury[1], P. Rousseau[1], G. Iaquaniello[1], T. Lefrou[1], A. Flacco[1], B. Vodungbo[1], G. Lambert[1], P. Zeitoun[1] and A. Rousse[1]
[1]LOA, Univ. Paris-Saclay, France, [2]LPGP, CNRS-Univ., France, [3]ELI Beamlines Project, Czech Republic, [4]APRI GIST, Korea, [5]LULI, France

ALPS17-7 14:45 **High Power Short Pulse CO_2 Laser for HVM EUV Lithography**
H. Hamano, K. Nowak, T. Suganuma, Y. Kurosawa, Y. Kawasuji
Gigaphoton Inc., Japan

-----Break (15:00-15:30)-----

15:30-16:30

ALPS18 : New sources

Room 416+417

Chair: F. Kannari, Steering Committee Chair

Keio Univ., Japan

ALPS18-1 15:30 **High-energy picosecond source based on an hybrid architecture**

J. Pouysegur[1], F. Guichard[1], Y. Zaouter[1], Q. Mocae[1], M. Hanna[2], F. Druon[2], C. Hönninger[2], E. Mottay[2], and P. Georges[2]

[1]Amplitude Systèmes, France, [2]Lab. Charles Fabry, France

ALPS18-2 15:45 **A cryogenically cooled Nd:YLF laser with orthogonally polarized emission**

T.-L. Huang, C.-Y. Cho, Y.-F. Chen

Dept. of Electrophysics, National Chiao Tung Univ., Taiwan

ALPS18-3 16:00 **Development of a 1 J Yb:YAG TRAM amplifier cooled by a closed-cycle cryocooler**

K. Iyama[1,2], S. Tokita[1], T. Kawashima[2], J. Kawanaka[1]

[1]ILE, Osaka Univ., Japan, [2]Hamamatsu Photonics K.K., Japan

ALPS18-4 16:15 **High-power coherent beam combining (CBC): Beam quality and coupling efficiency in CBC**

H. Chosrowjan[1], T. Kitamura[1], S. Taniguchi[1], M. Fujita[1,2], K. Tsubakimoto[2], H. Yoshida[2], N. Miyanaga[2], and Y. Izawa[1]

[1]Inst. for Laser Tech., Japan, [2]Inst. of Laser Eng., Japan

16:30

Closing

Room416+417

16:30-16:40

Award Ceremony

N. Nishizawa, Program Committee Chair

Nagoya Univ., Japan

16:40-16:50

Closing Remarks

F. Kannari, Steering Committee Chair

Keio Univ., Japan