

## Poster Session

**P-1 Observation of multiphoton transitions in laser-assisted electron scattering in a femtosecond intense laser field**

Kakuta Ishida, Reika Kanya, Yuya Morimoto, and Kaoru Yamanouchi (*Department of Chemistry, School of Science, The University of Tokyo*)

**P-2 Generation of full-coherent EUV free-electron laser seeded by high-order harmonics of femtosecond laser pulses**

Shigeki Owada<sup>1,2</sup>, S. Ogami<sup>1</sup>, A. Iwasaki<sup>1,2</sup>, T. Sato<sup>2</sup>, T. Togashi<sup>3</sup>, E. J. Takahashi<sup>4</sup>, K. Midorikawa<sup>4</sup>, M. Aoyama<sup>5</sup>, K. Yamakawa<sup>5</sup>, S. Mataubara<sup>2,3</sup>, K. Ogawa<sup>3</sup>, Y. Okayasu<sup>3</sup>, H. Tomizawa<sup>2,3</sup>, T. Watanabe<sup>3</sup>, M. Nagasano<sup>2</sup>, M. Yabashi<sup>2</sup>, T. Ishikawa<sup>2</sup>, and K. Yamanouchi<sup>1,2</sup> (<sup>1</sup>*Department of Chemistry, School of Science, The University of Tokyo*, <sup>2</sup>*RIKEN Harima Institute, RIKEN SPring-8 Center*, <sup>3</sup>*Spring-8/Japan Synchrotron Radiation Research Institute (JASRI)*, <sup>4</sup>*RIKEN Advanced Science Institute*, <sup>5</sup>*Kansai Photon Science Institute (Kizu), Japan Atomic Energy Agency*)

**P-3 Harmonic Generation from Relativistic Plasma Surfaces in Ultra-Steep Plasma Density Gradients**

Jana Bierbach<sup>1,2</sup>, C. Rödel<sup>1,2</sup>, D. an der Brügge<sup>3</sup>, M. Yeung<sup>4</sup>, B. Dromey<sup>4</sup>, S. Fuchs<sup>1,2</sup>, T. Hahn<sup>5</sup>, A. Galestian Pour<sup>1</sup>, S. Herzer<sup>1</sup>, S. Kuschel<sup>1</sup>, O. Jäckel<sup>1,2</sup>, M. C. Kaluza<sup>1,2</sup>, G. Pretzler<sup>5</sup>, A. Pukhov<sup>3</sup>, M. Zepf<sup>1,4</sup>, G. G. Paulus<sup>1,2</sup> (<sup>1</sup>*Institute of Optics and Quantum Electronics, Friedrich Schiller University Jena, Germany*, <sup>2</sup>*Helmholtz Institute Jena*, <sup>3</sup>*Institute for Theoretical Physics, Heinrich Heine University Düsseldorf*, <sup>4</sup>*Centre of Plasma Physics, Queen's University Belfast*, <sup>5</sup>*Institute for Laser- and Plasmaphysics, Heinrich Heine University Düsseldorf*)

**P-4 Spatial properties of Doppler harmonics generated on plasma mirrors**

Henri Vincenti, F. Quéré (*CEA, IRAMIS, Service des Photons Atomes et Molécules*)

**P-5 Time-evolution of electron density in plasma measured by high-order harmonic generation**

Hua Yang,<sup>1</sup> Peng Liu,<sup>1,\*</sup> Haihe Lu,<sup>1</sup> Xiaochun Ge,<sup>1</sup> Ruxin Li,<sup>1,2</sup> and Zhizhan Xu<sup>1</sup> (<sup>1</sup>*State Key Laboratory of High Field Laser Physics, Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Sciences*, <sup>2</sup>*ruxinli*)

**P-6 Two-color High Harmonic Generation Assisted by a replaced Gas Medium**

Seung Beom Park, Himanshu Singhal, Kyoung Hwan Lee, and Chang Hee Nam (*Department of Physics and Coherent X-ray Research Center, KAIST*)

**P-7 Waveform-Controlled Terahertz Radiation from the Air Filament Produced by Few-Cycle Laser Pulses**

Ya Bai, Liwei Song, Rongjie Xu, Chuang Li, Peng Liu, Ruxin Li, and Zhizhan Xu (*State Key Laboratory of High Field Laser Physics, Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Sciences*)

**P-8 Measurement and simulation results on retardance of waveplates for the application to isolated attosecond pulse generation**

Kyungseung Kim, Dongha Kim, Hanbit Oh, and Chang Hee Nam (*Department of Physics and Coherent X-ray Research Center, KAIST*)

- P-9 Femtosecond laser filamentation in condensed media with Bessel beams**  
Kirthika Dota, Abhishek Pathak, J. A. Dharmadhikari, D. Mathur, and A. K. Dharmadhikari (*Tata Institute of Fundamental Research*)
- P-10 High harmonic generation in air with ultrashort, mid-infrared laser pulses**  
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- P-11 Phase-controlled ionization dynamics of CS<sub>2</sub> in the strong field regime**  
Kirthika Dota, J. A. Dharmadhikari, A. K. Dharmadhikari, and D. Mathur (*Tata Institute of Fundamental Research*)
- P-12 Ejection of D<sup>+</sup> from C<sub>2</sub>D<sub>2</sub> in few-cycle intense laser fields: Dependence on the carrier-envelope phase**  
Shun Miura <sup>1</sup>, Toshiaki Ando <sup>1</sup>, Kazuki Ootaka <sup>1</sup>, Atsushi Iwasaki <sup>1</sup>, Huailiang Xu <sup>1</sup>, Tomoya Okino <sup>1</sup>, Kaoru Yamanouchi <sup>1</sup>, Dominik Hoff <sup>2</sup>, Tim Rathje <sup>2</sup>, Gerhard G. Paulus <sup>2</sup>, Markus Kitzler <sup>3</sup>, Andrius Baltuska <sup>3</sup>, Giuseppe Sanzone <sup>4</sup>, Mauro Nisoli <sup>4</sup> (<sup>1</sup> *School of Science, The University of Tokyo*, <sup>2</sup> *Institut für Optik und Quantenelektronik, Friedrich-Schiller-Universität*, <sup>3</sup> *Photonics Institute, Vienna University of Technology*, <sup>4</sup> *Department of Physics, Politecnico di Milano, National Research Council of Italy, Institute of Photonics and Nanotechnologies*)
- P-13 Fragment anisotropy of dissociative ionization of NO in the A<sup>2Σ<sup>+</sup> state in intense laser fields</sup>**  
Tomoyuki Endo, Mizuho Fushitani, Akitaka Matsuda, Akiyoshi Hishikawa (*Department of Chemistry, Graduate School of Science, Nagoya University*)
- P-14 The role phase in strong-field optimal control**  
Hyounguk Jang, G.Y. Chen, J. Lee and W. T. Hill, III (*Dept of Physics, IPST and JQI, University of Maryland*)
- P-15 Elongation of C-O distance in methanol in intense laser fields by time-dependent adiabatic molecular dynamics**  
Katsunori Nakai, Yoshihiro Nishiguchi, and Kaoru Yamanouchi (*Department of Chemistry, School of Science, The University of Tokyo*)
- P-16 Non-Born-Oppenheimer wave function of 1D hydrogen molecule by multiconfiguration time-dependent Hartree-Fock theory**  
Yoshihiro Ide, Tsuyoshi Kato, and Kaoru Yamanouchi (*Department of Chemistry, School of Science, The University of Tokyo*)
- P-17 Ion Momentum Distributions from Strong-field Ionization of Atomic Ions**  
Max Möller<sup>1,2</sup>, Tim Rathje<sup>1,2</sup>, P. Wustelt<sup>1</sup>, S. Trotsenko<sup>2,3</sup>, Th. Stöhlker<sup>1,2,3</sup>, A. M. Sayler<sup>1,2</sup> and G.G. Paulus<sup>1,2</sup> (<sup>1</sup>*Institute of Optics and Quantum Electronics, Friedrich Schiller University Jena*, <sup>2</sup>*Helmholtz Institute Jena*, <sup>3</sup>*GSI, Darmstadt*)
- P-18 Temporal Characterization of Ultrafast Photoionization in He**  
Dong Hyuk Ko, Jae-hwan Lee, and Chang Hee Nam (*Department of Physics and Coherent X-ray Research Center, KAIST*)

- P-19 Equations of motion for time-dependent multiconfiguration theory for electronic dynamics in a molecule in intense laser fields**  
Tsuyoshi Kato, Kaoru Yamanouchi (*Department of Chemistry, School of Science, The University of Tokyo*)
- P-20 Resonantly enhanced pair production in a simple model**  
F. Fillion-Gourdeau<sup>1</sup>, E. Lorin<sup>2</sup>, A.D. Bandrauk<sup>3</sup> (<sup>1</sup>*Centre de Recherches Mathématiques, Université de Montréal, Also at: School of Mathematics and Statistics, Carleton University, Ottawa, Also at: Fields Institute, University of Toronto, <sup>2</sup> School of Mathematics and Statistics, Carleton University, <sup>3</sup> Laboratoire de chimie théorique, Faculté des Sciences, Université de Sherbrooke)*
- P-21 Characterization of Sub-micron Sized Clusters in a Supersonic Gas Jet using Mie Scattering**  
Satoshi Jinno<sup>1</sup>, Y. Fukuda<sup>1</sup>, H. Sakaki<sup>1</sup>, A. Yogo<sup>1</sup>, M. Kanasaki<sup>1,2</sup>, K. Kondo<sup>1</sup>, A. Ya. Faenov<sup>1,3</sup>, I. Yu. Skobelev<sup>3</sup>, T. A. Pikuz<sup>1,3</sup>, A. S. Boldarev<sup>4</sup>, V. A. Gasilov<sup>4</sup> (<sup>1</sup>*Kansai Photon Science Institute, Japan Atomic Energy Agency, <sup>2</sup> Graduate School of Maritime Sciences, Kobe University, <sup>3</sup> Joint Institute for High Temperatures, Russian Academy of Sciences, <sup>4</sup> Keldysh Institute of Applied Mathematics, Russian Academy of Science*)
- P-22 Intense femtosecond laser-induced X-ray emission from gold nano-colloidal solutions: Laser chirp dependence**  
Koji Hatanaka,<sup>1,2</sup> K. Yoshida,<sup>3</sup> and K. Yamanouchi<sup>1,3</sup> (<sup>1</sup>*Center for Ultrafast Intense Laser Science, School of Science, The University of Tokyo, <sup>2</sup> PRESTO, Japan Science and Technology Agency, <sup>3</sup> Department of Chemistry, School of Science, The University of Tokyo*)
- P-23 Finding Quantum Coherence in Strongly Correlated Organic Crystals**  
Yoshitaka Matsubara<sup>1</sup>, Tadahiko Ishikawa<sup>1</sup>, Yoichi Okimoto<sup>1</sup>, Shin-ya Koshihara<sup>1, 2</sup>, Takaaki Hiramatsu<sup>3</sup>, Gunzi Saito<sup>3</sup>, Yoshiaki Nakano<sup>4</sup>, Hideki Yamochi<sup>4</sup>, and Ken Onda<sup>5, 6</sup> (<sup>1</sup>*Department of Chemistry and Materials Science, Tokyo Institute of Technology, <sup>2</sup>CREST, Japan Science and Technology Agency (JST), <sup>3</sup>Faculty of Agriculture, Meijo University*)
- P-24 Mechanism of nanograting inscription on the surface of fused silica**  
Feng Liang, Réal Vallée and See Leang Chin (*Centre d'optique, photonique et laser (COPL) and Département de physique, de génie physique et d'optique, Université Laval*)
- P-25 Evaluation of neutron properties from the (gamma, n) reaction due to laser-driven accelerated electron beam**  
Hironao Sakaki<sup>1</sup>, Yuji Fukuda<sup>1</sup>, Masato Kanasaki<sup>1</sup>, Mamiko Nishiuchi<sup>1</sup>, Satoshi Jinno<sup>1</sup>, Akifumi Yogo<sup>1</sup>, Tomoyo Fukami<sup>1</sup>, Yukinobu Watanabe<sup>2</sup>, Tatsuhiko Sato<sup>3</sup>, Koji Niita<sup>4</sup> (<sup>1</sup>*Quantum Beam Science Directorate, Japan Atomic Energy Agency, <sup>2</sup>Interdisciplinary Graduate School of Engineering Sciences, Kyushu University, <sup>3</sup>Nuclear Science and Engineering Directorate, Japan Atomic Energy Agency, <sup>4</sup>Simulation code development group, Research Organization for Information Science & Technology*)
- P-26 Design of a wide energy range stacked CR-39 detector diminishing contaminant photo-neutrons using Monte Carlo particle transport simulations**  
Masato Kanasaki <sup>1,2</sup>, Yuji Fukuda <sup>2</sup>, Hironao Sakaki <sup>2</sup>, Akifumi Yogo <sup>2</sup>, Satoshi Jinno <sup>2</sup>, Mamiko Nishiuchi <sup>2</sup>, Atsuto Hattori <sup>1</sup>, Kenya Matsukawa <sup>1</sup>, Kiminori Kondo <sup>2</sup>, Keiji Oda <sup>1</sup> and Tomoya Yamauchi <sup>1</sup> (<sup>1</sup>*Graduate School of Maritime Sciences, Kobe University, <sup>2</sup> Kansai Photon Science Institute, Japan Atomic Energy Agency*)

- P-27 Dynamics of Sub-microjoule Femtosecond Pulse Formation in a Negative Dispersion Regime**  
Dong Hoon Song<sup>1</sup>, Sung In Hwang<sup>2</sup>, Do-Kyeong Ko<sup>3</sup> (<sup>1</sup> *BT Convergence Research Department, Electronics and Telecommunications Research Institute*, <sup>2</sup> *Department of Photonics and Applied Physics, Gwangju Institute of Science and Technology*, <sup>3</sup> *Department of Photonics and Applied Physics, and Advanced Photonics Research Institute, Gwangju Institute of Science and Technology*)
- P-28 Development of Diode-pumped, Cryogenically-cooled Yb:YLF Chirped-pulse Regenerative Amplification Laser**  
Yutaka Akahane<sup>1,2</sup>, Kanade Ogawa<sup>1,2</sup>, and Koichi Yamakawa<sup>1,2</sup> (*JAEA*<sup>1</sup>, *JST-CREST*<sup>2</sup>)
- P-29 Construction of the ETRI 200-TW high power femtosecond laser system**  
Hwang Woon Lee, Dong Hoon Song, Won Bae Cho, Dong Ho Shin, Moon Youn Jung  
(*BioMedNeuron Research Team, BT Convergence Technology Research Department, Electronics and Telecommunications Research Institute*)