

Advances in Ultrafast Condensed Phase Physics

Monday - Tuesday 23 - 24 April 2018

Conference Sessions At A Glance

[SHOW](#) | [HIDE](#)

Hot Topics I
1: Novel Tools for Ultrafast Spectroscopy
2: Ultrafast Excitation Dynamics I
3: Ultrafast Excitation Dynamics II
4: Electron Dynamics in Nanosystems
5: High Harmonic Generation, Attosecond Physics in Solids
6: Ultrafast Excitation Dynamics III
 Hot Topics II
 Poster Session

Important Dates

[SHOW](#) | [HIDE](#)

Abstract Due:
25 October 2017

 Author Notification:
26 January 2018

 Manuscript Due Date:
26 March 2018

Conference Committee

[SHOW](#) | [HIDE](#)

Conference Chairs

Martin Schultze, Max-Planck-Institut für Quantenoptik (Germany)
[Eleftherios Goulielmakis](#), Max-Planck-Institut für Quantenoptik (Germany)
 Thomas Brabec, Univ. of Ottawa (Canada)

Program Committee

[Dimitrios Charalambidis](#), Foundation for Research and Technology-Hellas (Greece)
 Peter Hommelhoff, Max-Planck-Institut für Quantenoptik (Germany)

Program Committee continued...

[Gerhard G. Paulus](#), Helmholtz Institute Jena (Germany)
[Klaus Reimann](#), Max-Born-Institut für Nichtlineare Optik und Kurzzeitspektroskopie (Germany)
 Olga Smirnova, Max-Born-Institut für Nichtlineare Optik und Kurzzeitspektroskopie (Germany)
[Vladislav Yakovlev](#), Max-Planck-Institut für Quantenoptik (Germany)

MONDAY 23 APRIL

[Show All Abstracts](#)

Hot Topics I

Monday 23 April 2018
 9:00 AM - 11:00 AM
 Location: Schweitzer Auditorium

Photonics Europe 2018: Hot Topics Session I

From Einstein doubts to quantum bits: a second quantum revolution
Alain Aspect, Lab. Charles Fabry, Institut d'Optique, France

Pico-Photonics: watching and sensing single molecules by confining light to the atom scale
Jeremy J. Baumberg, NanoPhotonics Ctr., Univ. of Cambridge, United Kingdom

For additional details please visit <http://spie.org/x12297.xml>.

Coffee Break 11:00 AM - 11:20 AM


Session 1: Novel Tools for Ultrafast Spectroscopy

Monday 23 April 2018
 11:30 AM - 12:20 PM
 Location: Auditorium Cassin

Session Chair: Martin Schultze, Max-Planck-Institut für Quantenoptik (Germany)

Ultrafast magnetism and THz spintronics (*Invited Paper*)

Paper 10673-1
 Time: 11:30 AM - 12:00 PM
 Author(s): Markus Münzenberg, Georg-August-Univ. Göttingen (Germany)


[Add To My Schedule](#) 

Ultrafast dynamics of phase change material probed by frequency domain interferometry (Conference Presentation)

Paper 10673-2

Time: 12:00 PM - 12:20 PM

Author(s): Jérôme Gaudin, Irene Papagiannouli, Valérie Blanchet, Dominique Descamps, Claude Fourment, Stéphane Petit, Univ. de Bordeaux (France); Jean-Yves Raty, Univ. de Liège (Belgium); Nicolas Bernier, Pierre Noé, Jean-Baptiste Dory, CEA-LETI (France)

[Add To My Schedule](#) **Lunch Break 12:20 PM - 1:30 PM****Session 2:
Ultrafast Excitation Dynamics I**

Monday 23 April 2018

1:30 PM - 3:30 PM


Location: Auditorium Cassin

Session Chair: [Eleftherios Goulielmakis](#), Max-Planck-Institut für Quantenoptik (Germany)**Optically excited structural transition in atomic wires on surfaces at the quantum limit: a femtosecond ultrafast surface electron diffraction study (Invited Paper)**

Paper 10673-4

Time: 1:30 PM - 2:00 PM


Author(s): Michael Horn von Hoegen, Univ. Duisburg-Essen (Germany)

[Add To My Schedule](#) **Ultrafast near-field dynamics of polariton-exciton in WSe₂ slab waveguides at room temperature**

Paper 10673-5

Time: 2:00 PM - 2:20 PM


Author(s): Michael Mrejen, Lena Yadgarov, Assaf Levanon, Hadar Greener, Haim Suchowski, Tel Aviv Univ. (Israel)

[Add To My Schedule](#) **Ultrafast charge cooling and carrier multiplication in semiconductor nanocrystals and superlattices**

Paper 10673-6

Time: 2:20 PM - 2:40 PM

Author(s): Aditya Kulkarni, Laurens D. Siebbeles, Technische Univ. Delft (Netherlands)

[Add To My Schedule](#) **Effect of size confinement in C exciton dynamics of few-layered MoS₂ nano-sheets**

Paper 10673-7

Time: 2:40 PM - 3:00 PM


Author(s): Manobina Karmakar, Sayantan Bhattacharya, Subhrajit Mukherjee, Rup Kumar Chowdhury, Indian Institute of Technology Kharagpur (India); Samit K. Ray, Indian Institute of Technology Kharagpur (India), S.N. Bose National Ctr. for Basic Sciences (India); Prasanta Kumar Datta, Indian Institute of Technology Kharagpur (India)

[Add To My Schedule](#) **Plasmonics at the space-time limit (Invited Paper)**

Paper 10673-8

Time: 3:00 PM - 3:30 PM

Author(s): Martin Aeschlimann, Technische Univ. Kaiserslautern (Germany)

[Add To My Schedule](#) **Coffee Break 3:30 PM - 3:50 PM****Session 3:
Ultrafast Excitation Dynamics II**

Monday 23 April 2018

3:50 PM - 6:00 PM

Location: Auditorium Cassin

Session Chair: [Martin Aeschlimann](#), Technische Univ. Kaiserslautern (Germany)**Theoretical aspects of light-driven electronic dynamics in solids (Invited Paper)**

Paper 10673-9

Time: 3:50 PM - 4:20 PM


Author(s): Joachim Burgdörfer, Technische Univ. Wien (Austria)

[Add To My Schedule](#) **Attosecond metrology of phase-coherent multi-PHz currents in bulk solids**

Paper 10673-10

Time: 4:20 PM - 4:40 PM


Author(s): Manish Garg, Minjie Zhan, Hee-Yong Kim, Harshit Lakhota, Eleftherios Goulielmakis, Max-Planck-Institut für Quantenoptik (Germany)

[Add To My Schedule](#) **Relaxation dynamics of nonequilibrium electrons in noble metals, dielectrics and itinerant ferromagnets**

Paper 10673-11

Time: 4:40 PM - 5:00 PM


Author(s): Baerbel Rethfeld, Sebastian T. Weber, Nils Brouwer, Technische Univ. Kaiserslautern (Germany)

[Add To My Schedule](#) **Contrasted dynamics in the carrier relaxation in wide band gap oxides (Conference Presentation)**

Paper 10673-12

Time: 5:00 PM - 5:20 PM


Author(s): Stéphane Guizard, Commissariat à l'Énergie Atomique (France)

[Add To My Schedule](#) **The optical conductivity of dielectrics after ultrafast multiphoton excitation (Conference Presentation)**

Paper 10673-13

Time: 5:20 PM - 5:40 PM


Author(s): Vladislav S. Yakovlev, Michael S. Wismer, Max-Planck-Institut für Quantenoptik (Germany)

[Add To My Schedule](#) **Attosecond energy transfer dynamics in band-gap materials (Conference Presentation)**

Paper 10673-14

Time: 5:40 PM - 6:00 PM

Author(s): Florian Siegrist, Max-Planck-Institut für Quantenoptik (Germany), Ludwig-Maximilians-Univ. München (Germany); Annkatrin Sommer, Max-Planck-Institut für Quantenoptik (Germany); Malte Schröder, Tobias Boolakee, Max-Planck-Institut für Quantenoptik (Germany), Ludwig-Maximilians-Univ. München (Germany); Keyhan Golyari, Max-Planck-Institut für Quantenoptik (Germany); Ferenc Krausz, Martin Schultze, Max-Planck-Institut für Quantenoptik (Germany), Ludwig-Maximilians-Univ. München (Germany)

[Add To My Schedule](#) **TUESDAY 24 APRIL**[Show All Abstracts](#)

Session 4: Electron Dynamics in Nanosystems

Tuesday 24 April 2018

8:30 AM - 10:30 AM

Location: Auditorium Cassin

Session Chair: Markus Münzenberg, Georg-August-Univ. Göttingen (Germany)

Interaction of electron beams with nanostructures and light beyond adiabatic approximations

Paper 10673-15

Time: 8:30 AM - 8:50 AM


Author(s): Nahid Talebi, Max-Planck-Institut für Festkörperforschung (Germany); Jan Vogelsang, Christoph Lienau, Carl von Ossietzky Univ. Oldenburg (Germany)

[Add To My Schedule](#) **High harmonic generation in graphene (Conference Presentation)**

Paper 10673-16

Time: 8:50 AM - 9:10 AM


Author(s): Shatha Kaassamani, Rana Nicolas, David Gauthier, Dominik Franz, Willem Boutu, Hamed Merdji, CEA-Ctr. de SACLAY (France)

[Add To My Schedule](#) **Ultrafast phase transitions and excited state dynamics at surfaces (Invited Paper)**

Paper 10673-17

Time: 9:10 AM - 9:40 AM


Author(s): Martin Wolf, Fritz-Haber-Institut der Max-Planck-Gesellschaft (Germany)

[Add To My Schedule](#) **Ultrafast carrier dynamics in AlGaIn/GaN superlattices by time-dependent reflectivity measurements (Conference Presentation)**

Paper 10673-18

Time: 9:40 AM - 10:00 AM


Author(s): Felix Mahler, Klaus Reimann, Jens W. Tomm, Michael Woerner, Thomas Elsässer, Max-Born-Institut für Nichtlineare Optik und Kurzzeitspektroskopie (Germany); Veit Hoffmann, Markus Weyers, Ferdinand-Braun-Institut, Leibniz-Institut für Höchstfrequenztechnik (Germany)

[Add To My Schedule](#) **Ultrafast electron diffraction and microscopy using coherent electron sources (Invited Paper)**

Paper 10673-20

Time: 10:00 AM - 10:30 AM

Author(s): Claus Ropers, Georg-August-Univ. Göttingen (Germany)

[Add To My Schedule](#) 

Coffee Break 10:30 AM - 10:55 AM


Session 5: High Harmonic Generation, Attosecond Physics in Solids

Tuesday 24 April 2018
10:55 AM - 12:55 PM
Location: Auditorium Cassin

Session Chairs: [Eleftherios Goulielmakis](#), Max-Planck-Institut für Quantenoptik (Germany) ; [Vladislav S. Yakovlev](#), Max-Planck-Institut für Quantenoptik (Germany)

Microscopic modeling of ultrafast pulse generation in semiconductor microlasers (Invited Paper)

Paper 10673-21
Time: 10:55 AM - 11:25 AM
Author(s): Stephan W. Koch, Philipps-Univ. Marburg (Germany)

[Add To My Schedule](#) 


Amplification of solid high harmonics in semiconductor nanostructures (Conference Presentation)

Paper 10673-22
Time: 11:25 AM - 11:45 AM
Author(s): Dominik Franz, Rana Nicolas, Willem Boutu, CEA-Ctr. de SACLAY (France); Liping Shi, Leibniz Univ. Hannover, Institut für Quantenoptik (Germany); Quentin Ripault, Maria Kholodtsova, Bianca Iwan, CEA-Ctr. de SACLAY (France); Ugaitz Elu Etxano, ICFO - Institut de Ciències Fotòniques (Spain); Milutin Kovacev, Leibniz Univ. Hannover (Germany); Jens Biegert, ICFO - Institut de Ciències Fotòniques (Spain); Hamed Merdji, CEA-Ctr. de SACLAY (France)

[Add To My Schedule](#) 


Real space approach to high harmonic generation in solids (Conference Presentation)

Paper 10673-23
Time: 11:45 AM - 12:05 PM
Author(s): Harshit Lakhota, Minjie Zhan, Hee-Yong Kim, Eleftherios Goulielmakis, Max-Planck-Institut für Quantenoptik (Germany)

[Add To My Schedule](#) 


Extreme ultraviolet high harmonic generation and spectroscopy in condensed matters

Paper 10673-24
Time: 12:05 PM - 12:25 PM
Author(s): Tran Trung Luu, Zhong Yin, Arohi Jain, Thomas Gaumnitz, Hans Jakob Woerner, ETH Zurich (Switzerland)

[Add To My Schedule](#) 

Attosecond soft-X-ray spectroscopy of semimetal charge dynamics (Invited Paper)

Paper 10673-25
Time: 12:25 PM - 12:55 PM
Author(s): Jens Biegert, ICFO - Institut de Ciències Fotòniques (Spain)

[Add To My Schedule](#) 

Lunch/Exhibition Break 12:55 PM - 1:50 PM


Session 6: Ultrafast Excitation Dynamics III

Tuesday 24 April 2018
1:50 PM - 4:10 PM
Location: Auditorium Cassin

Session Chair: [Eleftherios Goulielmakis](#), Max-Planck-Institut für Quantenoptik (Germany)

Attosecond electron pulse trains and applications to time-resolved diffraction and microscopy (Invited Paper)

Paper 10673-26
Time: 1:50 PM - 2:20 PM
Author(s): Yuya Morimoto, Peter Baum, Ludwig-Maximilians-Univ. München (Germany), Max-Planck-Institut für Quantenoptik (Germany)

[Add To My Schedule](#) 


Band structure modification of wide-band-gap crystals by nonmonochromatic electron oscillations driven by high-intensity ultrashort pulses: multi-band and nonparabolic effects

(Canceled)
Paper 10673-27
Time: 2:20 PM - 2:40 PM
Author(s):

Ultrafast excited state dynamics of NHC-Fe(II) complexes designed for light harvesting (Conference Presentation)

Paper 10673-28
Time: 2:40 PM - 3:00 PM

Author(s): Stefan Haacke, Li Liu, Univ. de Strasbourg (France), CNRS (France); Edoardo Domenichini, Univ. de Strasbourg (France); Xavier Assfeld, Univ. de Lorraine (France); Philippe Gros, Univ. de Lorraine (France), CNRS (France), CNRS (France); Antonio Monari, Antonio Frances Moneris, Marc Beley, Cristina Cebrian Avila, Kevin Magra, Mariachiara Pastore, Univ. de Lorraine (France), CNRS (France)


[Add To My Schedule](#) 

Ab-initio simulation for propagation of ultrashort laser pulse in solids (Conference Presentation)

Paper 10673-29

Time: 3:00 PM - 3:20 PM

Author(s): Mitsuharu Uemoto, Kazuhiro Yabana, Univ. of Tsukuba (Japan)


[Add To My Schedule](#) 

Optoelectronic measurements of light fields by sub-cycle carrier injection in dielectrics (Conference Presentation)

Paper 10673-30

Time: 3:20 PM - 3:40 PM

Author(s): Dmitry Zimin, Max-Planck-Institut für Quantenoptik (Germany)


[Add To My Schedule](#) 

ELI-ALPS status report and research opportunities (Invited Paper)

Paper 10673-31

Time: 3:40 PM - 4:10 PM

Author(s): Dimitris Charalambidis, ELI-HU Nonprofit Kft. (Hungary); Giuseppe Sansone, Politecnico di Milano (Italy)

[Add To My Schedule](#) 

Coffee Break 4:10 PM - 4:30 PM

Hot Topics II

Tuesday 24 April 2018

4:30 PM - 6:05 PM

Location: Schweitzer Auditorium

Photonics Europe 2018: Hot Topics Session II

Coherent combination of fiber amplified ultrafast laser pulses

Jens Limpert, Institute of Applied Physics, Friedrich Schiller Univ. Jena, Germany

2D materials and their heterostructures: fundamentals, applications and prototypes

Frank Koppens, ICFO-The Institute of Photonic Sciences, Spain

For additional details, please visit <http://spie.org/x12297.xml>

Session PSTue: Poster Session

Tuesday 24 April 2018

6:00 PM - 7:30 PM

Location: Hall Rhin


Conference attendees are invited to attend the Photonics Europe poster session on Tuesday 18.00 to 19.30. Posters will be on display after 10.00 Tuesday morning in the Hall Rhin. Come view the posters, enjoy light refreshments, ask questions, and network with colleagues in your field. Authors of poster papers will be present to answer questions concerning their papers. Attendees are required to wear their conference registration badges to the poster sessions. Poster authors, view poster presentation guidelines and set-up instructions at <http://spie.org/x34963.xml>.

Ultrafast dynamics of Bloch surface waves in one-dimensional photonic crystal

Paper 10673-32

Time: 6:00 PM - 7:30 PM

Author(s): Anna A. Popkova, Vladimir O. Bessonov, Irina V. Soboleva, Andrey A. Fedyanin, M.V. Lomonosov Moscow State Univ. (Russian Federation)

[Add To My Schedule](#) 

Ultrafast structural dynamics of metallic materials studied by photoelectron spectroscopy

Paper 10673-33

Time: 6:00 PM - 7:30 PM

Author(s): Manuel de Anda Villa, Anna Levy, Institut des NanoSciences de Paris (France); Jérôme Gaudin, Ctr. Lasers Intenses et Applications (France), Ctr. National de la Recherche Scientifique (France); Sophie Cervera, Institut des NanoSciences de Paris (France); Benoit Chimier, Univ. Bordeaux 1 (France); P. Combis, Commissariat à l'Énergie Atomique (France); D. Descamps, Univ. de Bordeaux (France); N. Fedorov, Univ. Bordeaux 1 (France); R. Grisenti, Goethe- Univ. Frankfurt am Main (Germany); E. Lamour, S. Macé, Institut des NanoSciences de Paris (France); P. Martin, S. Petit, Univ. Bordeaux 1 (France); C. Prigent, Institut des NanoSciences de Paris (France); V. Recoules, Commissariat à l'Énergie Atomique (France); J. P. Rozet, Institut des NanoSciences de Paris (France); L. Soulard, Commissariat à l'Énergie Atomique (France); S. Steydli, Martino Trassinelli, Institut des NanoSciences de Paris (France); K. Ueda, Tohoku Univ. (Japan); L. Videau, Commissariat à l'Énergie Atomique (France); Dominique Vernhet, Institut des NanoSciences de Paris (France); Y. Ito, Tohoku Univ. (Japan)

[Add To My Schedule](#) 