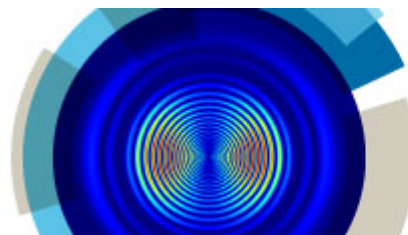


# Ultrafast Imaging of Photochemical Dynamics

Faraday Discussion

Wednesday 31 August



31 August -  
2 September 2016  
Edinburgh, UK

11:30	Registration, Tea and Coffee	
12:00	Lunch	
12:45	<b>Welcome and Introductions</b> Adam Kirrander and Russell S. Minns, <i>Chairs of Scientific Committee</i>	
12:55	<b>Outline of Discussion Format</b> Helen Lunn and Jeremy Allen <i>Royal Society of Chemistry Publishing Editors</i>	
13:00	<b>Introductory Lecture</b> Daniel Neumark <i>University of California, Berkeley, USA</i>	
	<b>Session 1 Electronic and non-adiabatic dynamics</b> (Session Chairs: Adam Kirrander and Russell Minns)	
14:00	<b>Decoherence, control and attosecond probing of XUV-induced charge migration in biomolecules. A theoretical outlook</b> Manuel Lara-Astiaso, David Ayuso, Ivano Tavernelli, Piero Decleva, Alicia Palacios and Fernando Martín <i>Universidad Autónoma de Madrid, Spain</i>	<b>Paper 10903</b>
14:05	<b>Dissipative dynamics at conical intersections: simulations with the hierarchy equations of motion method</b> Lipeng Chen, Maxim F. Gelin, Vladimir Y. Chernyak, <u>Wolfgang Domcke</u> and Yang Zhao <i>Technische Universität München, Germany</i>	<b>Paper 11057</b>
14:10	<b>Toward fully quantum modelling of ultrafast photodissociation imaging experiments. Treating tunnelling in the <i>ab initio</i> multiple cloning approach</b> Dmitry V. Makhov, Todd J. Martinez and <u>Dmitrii V. Shalashilin</u> <i>University of Leeds, UK</i>	<b>Paper 11039</b>
14:15	<b>Electron and nuclear dynamics following ionisation of modified bismethylene-adamantane</b> Morgane Vacher, Fabio E. A. Albertani, Andrew J. Jenkins, Iakov Polyak, Michael J. Bearpark and Michael A. Robb <i>Imperial College London, UK</i>	<b>Paper 11034</b>
14:20	Discussion	
16:00	Afternoon tea	
16:30	<b>Beyond structure: ultrafast X-ray absorption spectroscopy as a probe of non-adiabatic wavepacket dynamics</b> Simon P. Neville, Vitali Averbukh, Serguei Patchkovskii, Marco Ruberti, Renjie Yun, Majed Chergui, <u>Albert Stolow</u> and Michael S. Schuurman <i>University of Ottawa, Canada</i>	<b>Paper 10908</b>
16:35	<b>Structural dynamics of photochemical reactions probed by time-resolved photoelectron spectroscopy using high harmonic pulse</b> Ryo Iikubo, Taro Sekikawa, Yu Harabuchi and Tetsuya Taketsugu <i>Hokkaido University, Japan</i>	<b>Paper 11049</b>
16:40	<b>Molecular frame photoemission by a comb of elliptical high-order harmonics: a sensitive probe of both photodynamics and harmonic complete polarization state</b> K. Veyrinas, V. Gruson, S. J. Weber, L. Barreau, T. Ruchon, J.-F. Hergott, J.-C. Houver, R. R. Lucchese P. Salières and <u>D. Dowek</u>	<b>Paper 11214</b>

	<i>University of Nebraska-Lincoln, USA</i>	
16:45	<b>Observation of multi-channel non-adiabatic dynamics in aniline derivatives using time-resolved photoelectron imaging</b> Magdalena M. Zawadzki, Marco Candelaresi, Lisa Saalbach, Stuart W. Crane, Martin J. Paterson and <u>Dave Townsend</u> <i>Heriot-Watt University, UK</i>	<b>Paper 11088</b>
16:50	Discussion	
18:30	Poster Session and Wine Reception (Even Numbers)	
19:30	Close of sessions	

#### Thursday 1 September

	<b>Session 2 Attosecond processes and X-ray spectroscopy</b> (Session Chairs: Jon Marangos and Olga Smirnova)	
09:00	<b>Novel photochemistry of molecular polaritons in optical cavities</b> Kochise Bennett, Markus Kowalewski and <u>Shaul Mukamel</u> <i>University of California, Irvine, USA</i>	<b>Paper 10905</b>
09:05	<b>Four-wave-mixing experiments with seeded free electron lasers</b> <u>F. Bencivenga</u> , A. Calvi, F. Capotondi, R. Cucini, R. Mincigrucci, A. Simoncig, M. Manfredda, E. Pedersoli, E. Principi, F. Dallari, R. A. Duncan, M. G. Izzo, G. Knopp, A. A. Maznev, G. Monaco, S. Di Mitri, A. Gessini, L. Giannessi, N. Mahne, I. P. Nikolov, R. Passuello, L. Raimondi, M. Zangrando and C. Masciovecchio <i>Eletra-Sincrotrone Trieste S.C.p.A., Italy</i>	<b>Paper 11071</b>
09:10	<b>Stimulated X-ray Raman scattering – a critical assessment of the building block of nonlinear X-ray spectroscopy</b> <u>Victor Kimberg</u> , Alvaro Sanchez-Gonzalez, Laurent Mercadier, Clemens Weninger, Alberto Lutman, Daniel Ratner, Ryan Coffee, Maximilian Bucher, Melanie Mucke, Marcus Agåker, Conny Sâthe, Christoph Bostedt, Joseph Nordgren, Jan Erik Rubensson and Nina Rohringer <i>Royal Institute of Technology, Sweden</i>	<b>Paper 11101</b>
09:15	Discussion	
10:30	Morning Tea	
11:00	<b>Probing ultrafast dynamics of chiral molecules using time-resolved photoelectron circular dichroism</b> Samuel Beaulieu, Antoine Comby, Baptiste Fabre, Dominique Descamps, Amélie Ferré, Gustavo Garcia, Romain Géneaux, Francois Légaré, Laurent Nahon, Stéphane Petit, Thierry Ruchon, Bernard Pons, Valérie Blanchet and <u>Yann Mairesse</u> <i>CELIA (CNRS UMR 5107), Université Bordeaux 1, France</i>	<b>Paper 10902</b>
11:05	<b>Role of tunnel ionization in high harmonic generation from substituted benzenes</b> <u>Dane R. Austin</u> , Felicity McGrath, Lukas Miseikis, David Wood, Peter Hawkins, Allan S. Johnson, Morgane Vacher, Zdeněk Mašín, Alex Harvey, Misha Ivanov, Olga Smirnova and Jon P. Marangos <i>Imperial College London, UK</i>	<b>Paper 11107</b>
11:10	<b>Multidimensional high harmonic spectroscopy of polyatomic molecules: detecting sub-cycle laser-driven hole dynamics upon ionization in strong mid-IR laser fields</b> Barry D. Bruner, Zdeněk Mašín, Matteo Negro, Felipe Morales, Danilo Brambilla, Michele Devetta, Davide Facciala, Alex Harvey, Misha Ivanov, Yann Mairesse, Serguei Patchkovskii, Valeria Serbinenko, Hadas Soifer, Salvatore Stagira, Caterina Vozzi, <u>Nirit Dudovich</u> and Olga Smirnova	<b>Paper 11180</b>

	<i>Weizmann Institute of Science, Israel</i>	
11:15	<b>Using high harmonic radiation to reveal the ultrafast dynamics of radiosensitiser molecules</b> Pierre Çarçabal, Dominique Descamps, Stéphane Petit, Yann Mairesse, Valérie Blanchet and <u>Raluca Cireasa</u> <i>Institut des Sciences Moléculaires d'Orsay (ISMO), France</i>	<b>Paper 11112</b>
11:20	Discussion	
13.00	Lunch	
	<b>Session 3 Structural dynamics</b> (Session Chair: Hans Jakob Wörner and Dwayne Miller)	
14.00	<b>Strong-field-induced wave packet dynamics in carbon dioxide molecule</b> Artem Rudenko, Varun Makhija, Aram Vajdi, Thorsten Ergler, Markus Schürholz, Joachim Ullrich, Robert Moshhammer and Vinod Kumarappan <i>Kansas State University, USA</i>	<b>Paper 10907</b>
14:05	<b>Towards controlling the dissociation probability by light-induced conical intersections</b> András Csehi, Gábor J. Halász, Lorenz S. Cederbaum and <u>Ágnes Vibók</u> <i>University of Debrecen/ELI-ALPS, Hungary</i>	<b>Paper 11054</b>
14:10	<b>Visualization of bond rearrangements in acetylene using near single-cycle laser pulses</b> <u>Christian Burger</u> , Nora G. Kling, Robert Siemering, Ali S. Alnaser, Boris Bergues, Abdallah M. Azzeer, Robert Moshhammer, Regina de Vivie-Riedle, Matthias Kübel and Matthias F. Kling <i>Ludwig-Maximilians-Universität München, Germany</i>	<b>Paper 10920</b>
14:20	<b>Interference stabilization of autoionizing states in molecular N<sub>2</sub> studied by time- and angular-resolved photoelectron spectroscopy</b> Martin Eckstein, Nicola Mayer, Chung-Hsin Yang, Giuseppe Sansone, Marc J. J. Vrakking, Misha Ivanov and <u>Oleg Kornilov</u> <i>Max-Born Institute, Germany</i>	<b>Paper 11093</b>
14:25	Discussion	
16.00	Afternoon Tea	
16:30	<b>Femtosecond photodissociation dynamics of 1,4-diiodobenzene by gas-phase X-ray scattering and photoelectron spectroscopy</b> Brian Stankus, James M. Budarz, Adam Kirrander, David Rogers, Joseph Robinson, Thomas J. Lane, Daniel Ratner, Jerome Hastings, <u>Michael P. Minitti</u> and Peter M. Weber <i>SLAC National Accelerator Laboratory, USA</i>	<b>Paper 10904</b>
16.35	<b>Femtosecond charge and molecular dynamics of I-containing organic molecules induced by intense X-ray free-electron laser pulses</b> K. Nagaya, K. Motomura, E. Kukk, Y. Takahashi, K. Yamazaki, S. Ohmura, H. Fukuzawa, S. Wada, S. Mondal, T. Tachibana, Y. Ito, R. Koga, T. Sakai, K. Matsunami, K. Nakamura, M. Kanno, A. Rudenko, C. Nicolas, X.-J. Liu, C. Miron, Y. Zhang, Y. Jiang, J. Chen, M. Anand, D. E. Kim, K. Tono, M. Yabashi, M. Yao, H. Kono and <u>K. Ueda</u> <i>Tohoku University, Japan</i>	<b>Paper 11065</b>
16:40	<b>Femtosecond gas phase electron diffraction with MeV electrons</b> Jie Yang, Markus Guehr, Theodore Vecchione, Matthew S. Robinson, Renkai Li, Nick Hartmann, Xiaozhe Shen, Ryan Coffee, Jeff Corbett, Alan Fry, Kelly Gaffney, Tais Gorkhover, Carsten Hast, Keith Jobe, Igor Makasyuk, Alexander Reid, Joseph Robinson, Sharon Vetter, Fenglin Wang, Stephen Weathersby, Charles Yoneda, Xijie Wang and <u>Martin Centurion</u>	<b>Paper 11041</b>

	<i>University of Nebraska, USA</i>	
16:45	Discussion	
18:00	Poster Session and Wine Reception (Odd numbers)	
19:00	Close of session	
19:15	Conference Dinner - Ghiile Dhu, Rutland Street, Edinburgh	

## Friday 2 September

	<b>Session 4 Vibrational and condensed phase dynamics</b> (Session Chairs: Dan Neumark and Peter Weber)	
09:00	<b>Towards characterization of photo-excited electron transfer and catalysis in natural and artificial systems using XFELs</b> R. Alonso-Mori, K. Asa, U. Bergmann, A. S. Brewster, R. Chatterjee, J. K. Cooper, H. M. Frei, F. D. Fuller, E. Goggins, S. Gul, H. Fukuzawa, D. Iablonskyi, M. Ibrahim, T. Katayama, T. Kroll, Y. Kumagai, B. A. McClure, J. Messinger, K. Motomura, K. Nagaya, T. Nishiyama, C. Saracini, Y. Sato, N. K. Sauter, D. Sokaras, T. Takanashi, T. Togashi, K. Ueda, W. W. Weare, T.-C. Weng, M. Yabashi, V. K. Yachandra, I. D. Young, A. Zouni, J. F. Kern and <u>J. Yano</u> <i>Lawrence Berkeley National Laboratory, USA</i>	<b>Paper 10909</b>
09:05	<b>Imaging ultrafast excited state pathways in transition metal complexes by X-ray transient absorption and scattering using X-ray free electron laser source</b> <u>Lin X. Chen</u> , Megan L. Shelby, Patrick J. Lestrangle, Nicholas E. Jackson, Kristoffer Haldrup, Michael W. Mara, Andrew B. Stickrath, Diling Zhu, Henrik Lemke, Matthieu Chollet, Brian M. Hoffman and Xiaosong Li <i>Northwestern University/Argonne National Laboratory, USA</i>	<b>Paper 11051</b>
09:10	<b>Towards efficient time-resolved X-ray absorption studies of electron dynamics at photocatalytic interfaces</b> Stefan Neppel, Johannes Mahl, Anton S. Tremsin, Bruce Rude, Ruimin Qiao, Wanli Yang, Jinghua Guo and <u>Oliver Gessner</u> <i>Lawrence Berkeley National Laboratory, USA</i>	<b>Paper 11048</b>
09:15	Discussion	
10:30	Morning Tea	
11:00	<b>Probing the excited state relaxation dynamics of pyrimidine nucleosides in chloroform solution</b> Katharina Röttger, Hugo J. B. Marroux, Hendrik Böhnke, David T. J. Morris, Angus T. Voice, Friedrich Temps, Gareth M. Roberts and <u>Andrew J. Orr-Ewing</u> <i>University of Bristol, UK</i>	<b>Paper 10906</b>
11:05	<b>Towards elucidating the photochemistry of the sunscreen filter ethyl ferulate using time-resolved gas-phase spectroscopy</b> N. D. N. Rodrigues, M. Staniforth, J. D. Young, Y. Peperstraete, N. C. Cole-Filipiak, J. R. Gord, P. S. Walsh, D. M. Hewett, T. S. Zwieter and <u>V. G. Stavros</u> <i>University of Warwick, UK</i>	<b>Paper 10916</b>
11:10	<b>Probing spin-vibronic dynamics using femtosecond X-ray spectroscopy</b> <u>T. J. Penfold</u> , M. Pápai, T. Rozgonyi, K. B. Møller and G. Vankó <i>Newcastle University, UK</i>	<b>Paper 11085</b>
11:15	Discussion	
12:30	<b>Concluding Remarks Lecture</b> R.J Dwayne Miller <i>Max Planck Institute for the Structure &amp; Dynamics of Matter, Germany</i>	
13:15	<b>Acknowledgements</b>	
13:30	<b>Close of meeting and Lunch</b>	

Presenting authors are indicated in the programme by an underline. The affiliation is for the presenting author. If the presenting author of your paper has changed since abstract selection please email [events@rsc.org](mailto:events@rsc.org). Please note that this is a draft programme and timings may change.