

International Conference on Many Particle Spectroscopy of Atoms, Molecules, Clusters and Surfaces

Sendai JAPAN
September 4-7, 2010

[Home](#)

[Dates](#)

[Venue](#)

[Access](#)

[Invited Speakers](#)

[Conference Program](#)

[Guidelines](#)

[Abstract](#)

[Registration](#)

[Accommodation](#)

[Social Program](#)

[Proceedings](#)

[Support](#)

[Sponsors/Exhibitors](#)

[Cooperation](#)

[Committees](#)

[Contact](#)

[Other Conferences](#)

[Links](#)

Conference Program

Conference Time Schedule

	Sep. 4 Saturday	Sep. 5 Sunday	Sep. 6 Monday	Sep. 7 Tuesday	Sep. 8 Wednesday
		Opening (8:15-8:30)			
		Session 1 8:30-10:00 R. J. D. Miller J. Colgan A. Senftleben	Session 5 8:30-10:00 P. Corkum C. D. Lin P. Johnsson	Session 9 8:30-10:05 P. Bolognesi I. Bray R. D. DuBois L. Hargreaves	Excursion
		Coffee break 10:00-10:30	Coffee break 10:00-10:30	Coffee break 10:05-10:30	
		Session 2 10:30-12:05 A. L-Bennani C. Dal Cappello G. F. Hanne T. Hirayama	Session 6 10:30-12:05 A. Belkacem R. Moshammer N. Berrah A. Hishikawa	Session 10 10:30-11:30 X.-M. Tong Y. Suzuki D. Rolles Business Meeting 11:30-12:05	
		Lunch 12:05-13:35	Lunch 12:05-13:35	Lunch 12:05-13:35	
		Session 3 13:35-15:30 M. Schulz D. Fischer C. A. Tachino A. Itoh L. Tribedi	Session 7 13:35-15:25 O. Fojón R. Dörner T. Odagiri L. Avaldi F. Penent	Session 11 13:35-15:15 X. Ma X. G. Ren G. Purohit C. Colyer K. Kouzakov Closing (15:15-15:30)	
			Poster 15:30-16:55	Poster 15:25-16:55	
		Session 4 16:55-18:30 F. Schumann S. Samarin Y. Pavlyukh K. Mase	Session 8 16:55-18:00 U. Saalman T. Fennel K. Nagaya The Morino Foundation 18:00-18:20 E. Hirota		
	Registration 16:00-20:00				
	Welcome Reception 18:00-20:00				

		Banquet 19:30-21:30
--	--	------------------------

Invited and Oral Sessions

Sunday, 5 Sep.

8:15- Opening

Session1 : Lepton I (Chair: K. Ueda)

8:30-9:10 (Plenary Lecture)

R. J. D. Miller (U. Tronto, Canada)

Making the Molecular Movie: First Frames

9:10-9:35 (Progress Report)

J. Colgan (LANL, USA)

Ionization of oriented molecules using the time-dependent close-coupling approach

9:35-10:00 (Progress Report)

A. Senftleben (MPI-K, Germany)

(e,2e) on aligned hydrogen molecules - fully differential results

Coffee break (10:00-10:30)

Session2 : Lepton II (Chair: M. Deleuze)

10:30-10:55 (Progress Report)

A. Lahmam-Bennani (U. Paris-Sud 11, France)

Electron impact double ionization of rare gases: Predominance of non-first order effects at intermediate impact energy

10:55-11:20 (Progress Report)

C. Dal Cappello (U. Paul Verlaine-Metz, France)

(e,3e) and (e,3-1e) differential cross sections for the double ionization of water molecule

11:20-11:45 (Progress Report)

G. F. Hanne (U. Münster, Germany)

Spin-resolved electron-impact ionization of atomic targets

11:45-12:05 (Hot Topic)

T. Hirayama (Rikkyo U., Japan)

Surface sensitive measurement of excitonic processes in rare gas clusters by electron energy loss spectroscopy

Lunch (12:05-13:35)

Session3 : Ion (Chair: R. D. Rivarola, Y. Zou)

Chair: R. D. Rivarola

13:35-14:00 (Progress Report)

M. Schulz (Missouri U. Sci. & Tech., USA)

Three-body dynamics in ionization of atomic hydrogen by proton impact

14:00-14:25 (Progress Report)

D. Fischer (MPI-K, Germany)

Dynamics in ion-impact induced double-ionization of atoms

Chair: Y. Zou

14:25-14:50 (Progress Report)

C. A. Tachino (CONICET-UNR, Argentina)

Coherence and partial localization in electron emission from diatomic molecules

14:50-15:10 (Progress Report)

A. Itoh (Kyoto U., Japan)

Multiple ionization and fragmentation of polyatomic molecules by fast heavy ions

15:10-15:30 (Progress Report)

L. Tribedi (Tata Inst. Fundamental Res., India)

Collisions involving fullerenes and large molecules

Poster Session(15:30-16:55)

Session4 : Surface (Chair: G. Stefani)

16:55-17:20 (Progress Report)

F. Schumann (MPI-Halle, Germany)

Electron pair emission from ferromagnetic surfaces

17:20-17:45 (Progress Report)

S. Samarin (U. Western Australia, Australia)

Spin-polarized two-electron spectroscopy at surfaces

17:45-18:10 (Progress Report)

Y. Pavlyukh (U. Halle-Wittenberg, Germany)

Theory for coincidence spectroscopy of molecules and surfaces

18:10-18:30 (Progress Report)

K. Mase (KEK, Japan)

Auger decays and ion desorption of surface molecules studied with Auger-photoelectron and electron-ion coincidence spectroscopy

Monday, 6 Sep.

Session5 : Photon I (Chair: J. Ullrich)

8:30-9:10 (Plenary Lecture)

P. Corkum (NRC, Canada)

Probing Correlations between Electrons in Atoms and Molecules

9:10-9:35 (Progress Report)

C. D. Lin (Kansas State U., USA)

Ultrafast dynamic imaging of molecules with intense few-femtosecond infrared laser pulses

9:35-10:00 (Progress Report)

P. Johnsson (Lund U., Sweden)

Towards time-resolved electron diffraction from aligned molecules

Coffee break (10:00-10:30)

Session6 : Photon II (Chair: U. Becker)

10:30-10:55 (Progress Report)

A. Belkacem (LBNL, USA)

Probing non-Born-Oppenheimer dynamics in polyatomic molecules with two-color EUV pulse pairs

10:55-11:20 (Progress Report)

R. Moshhammer (MPI-K, Germany)

XUV-pump XUV-probe experiments at FELs

11:20-11:45 (Progress Report)

N. Berrah (Western Michigan U., USA)

Observation of multiphoton physics: First experiments using the LCLS X-ray FEL

11:45-12:05 (Hot Topic)

A. Hishikawa (Nagoya U., Japan)

Single shot photoelectron spectroscopy of multiphoton double ionization of Ar in intense EUV laser fields

Lunch (12:05-13:35)

Session7 : Photon III (Chair: M. N. Piancastelli)

13:35-14:00 (Progress Report)

O. Fojón (CONICET-UNR, Argentina)

Interference and non-Franck-Condon effects in ionization of H₂ molecules by electron and photon impact

14:00-14:25 (Progress Report)

R. Dörner (U. Frankfurt, Germany)

Breaking the longest bond: Mechanisms of photo double ionization of the helium dimer

14:25-14:45 (Progress Report)

T. Odagiri (Tokyo Tech., Japan)

The generation of an entangled pair of H(2p) atoms in the photodissociation of H₂

14:45-15:05 (Progress Report)

L. Avaldi (CNR-IMIP, Italy)

Two-photon experiments combining synchrotron radiation and laser

15:05-15:25 (Hot Topic)

F. Penent (CNRS-UPMC, France)

Multiple photo-ionization and multiple Auger decay in simple molecules

Poster Session(15:25-16:55)

Session8 : Cluster (Chair: S. Sorensen)

16:55-17:20 (Progress Report)

U. Saalman (MPI-PKS, Germany)

Clusters in strong XUV and Xray pulses: Electron emission and proton ejection

17:20-17:40 (Hot Topic)

T. Fennel (U. Rostock, Germany)

Clusters in intense XUV pulses: Ionization heating and time-resolved imaging of cluster space-charge potentials

17:40-18:00 (Hot Topic)

K. Nagata (Kobe U., Japan)

Studies on interaction of clusters with intense EUV-FEL pulses at SPring8

Morino Foundation for Molecular Science

18:00-18:20

E. Hirota

The Morino Foundation for Molecular Science and Professor and Mrs Yonezo Morino

Banquet (19:30-21:30)

Tuesday, 7 Sep.

Session9 : Lepton III (Chair: F. Wang)

8:30-8:55 (Progress Report)

P. Bolognesi (CNR-IMIP, Italy)

(e,2e) experiments on Mg and C₆₀

8:55-9:20 (Progress Report)

I. Bray (Curtin U. Tech., Australia)

Single ionisation of helium by electron impact

9:20-9:45 (Progress Report)

R. D. DuBois (Missouri U. Sci. & Tech., USA)

Differential positron and electron ionization studies: How a plus or minus sign makes a difference

9:45-10:05 (Progress Report)

L. Hargreaves (U. Adelaide, Australia)

Low-energy (e,2e) cross sections for molecules of environmental and technological relevance

Coffee break (10:05-10:30)

Session10 : Photon IV (Chair: E. Sokell)

10:30-10:50 (Hot Topic)

X.-M. Tong (U. Tsukuba, Japan)

Infrared laser assisted photoabsorption of atoms

10:50-11:10 (Hot Topic)

Y. Suzuki (Kyoto U., Japan)

Femtosecond time-resolved photoelectron imaging of nitric oxide and pyrazine

11:10-11:30 (Hot Topic)

D. Rolles (CFEL, Germany)

Time-resolved photoelectron diffraction on laser-aligned molecules

Business Meeting (11:30-12:05)

Lunch (12:05-13:35)

Session11 : Lepton IV, Ion (Chair: X.J. Chen, N. Kouchi)

Chair: X.J. Chen

13:35-13:55 (Hot Topic)

X. Ma (Chinese Acad. Sci., P. R. China)

Molecular structure effects in the dynamics of ion-molecule collisions

13:55-14:15 (Progress Report)

X. G. Ren (MPI-K, Germany)

High resolution electron momentum spectroscopy (EMS) of molecules

Chair: N. Kouchi

14:15-14:35 (Hot Topic)

G. Purohit (Sir Padampat Singhanian U., India)

Calculation of (e, 2e) triple differential cross sections of Mg in coplanar geometry

14:35-14:55 (Hot Topic)

C. Colyer (U. Adelaide, Australia)

Dynamical (e, 2e) studies using tetrahydrofuran as a DNA analogue

14:55-15:15 (Hot Topic)

K. Kouzakov (Moscow State U., Russia)

Laser-assisted electron momentum spectroscopy

15:15- Closing

Poster Session

Sunday, 5 and Monday 6, Sep.

Poster No.	Title Author(s)
P01	Electron induced dissociation of H₂ and CO₂: molecular frame (e, 2e) spectroscopy <u>X. Ren</u> , T. Pflüger, S. Xu, A. Senftleben, A. Dorn, J. Ullrich (Max-Planck-Institut für Kernphysik)
P02	Low energy electron impact ionization and fragmentation of CH₄: (e, 2e) triple differential cross section S. Xu, <u>X. Ren</u> , T. Pflüger, A. Senftleben, A. Dorn, J. Ullrich (Max-Planck-Institut für Kernphysik)
P03	Autoionization of H₂ doubly-excited states - kinematically complete electron impact study <u>A. Senftleben</u> , T. Pflüger, X. Ren, A. Dorn, J. Ullrich (MPI für Kernphysik)
P04	Electron impact ionization-excitation of a two electron atom within the Temkin-Poet model M. J. Ambrosio, G. Gasaneo, <u>F. D. Colavecchia</u> (División Colisiones Atómicas, Centro Atómico Bariloche)
P05	Electron-Hydrogen collisions with Generalized Sturmians: the Temkin-Poet model A. L. Frapiccini, J. M. Randazzo, G. Gasaneo, L. U. Ancarani, <u>F. D. Colavecchia</u> (División Colisiones Atómicas, Centro Atómico Bariloche)
P06	Multiple ionization of atomic systems by fast electron impact <u>K. A. Kouzakov</u> , Yu. V. Popov, O. Chuluunbaatar (Faculty of Physics, Moscow State University)
P07	Elastic Electron Scattering from the DNA Bases: Cytosine and Thymine <u>C. J. Colyer</u> , S. M. Bellm, F. Blanco, G. Garcia, B. Lohmann (CAMS, Adelaide University)
P08	Dynamical (e, 2e) studies using tetrahydrofuran as a DNA analogue <u>C. J. Colyer</u> , S. M. Bellm, O. Al-Hagan, D. Madison, B. Lohmann (CAMS, Adelaide University)
P09	(e, 2e+M) measurements of molecular nitrogen at large momentum transfer <u>D. B. Jones</u> , M. Yamazaki, N. Watanabe, M. Takahashi (IMRAM, Tohoku University)

- P10 Development of a highly sensitive 2 n -type (e, 2e) spectrometer**
H. Satoh, M. Yamazaki, D. Jones, Y. Asano, N. Watanabe, A. Czasch, O. Jagutzki, R. Dörner, M. Takahashi
 (IMRAM, Tohoku University)
- P11 Electron Momentum Spectroscopy of n-butane: studying the anti- and gauche-conformers**
E. A. Virgo, K. L. Nixon, M. J. Brunger, W. D. Lawrance
 (Flinders University)
- P12 Electron momentum spectroscopy of large n-alkane chains: tracking fingerprints for methylenic hyperconjugation**
M. S. Deleuze, F. Morini, S. Knippenberg, B. Hajgató
 (Theoretical Chemistry, Hasselt University)
- P13 High resolution electron momentum spectroscopy of the valence orbitals of N₂O**
C.-W. Huang, X. Shan, E.-L. Wang, Z. Zhang, X.-J. Chen
 (Department of Modern Physics, University of Science and Technology of China)
- P14 Electron momentum spectroscopy study on the satellite transitions of the neon and argon valence shells**
N. Watanabe, M. Yamazaki, D. B. Jones, M. Takahashi
 (IMRAM, Tohoku University)
- P15 Coherent emission for dissociative ionization of molecular hydrogen by electron impact**
C. R. Stia, O. A. Fojon, R. D. Rivarola
 (Instituto de Física Rosario, CONICET-UNR)
- P16 Development of the collision platform for studying of the interaction of e⁻ and molecule**
B. Wei, Z. Chen, X. Wang, S. Lin, D. Lu, R. Hutton, Y. Zou
 (Fudan University)
- P17 First results from the collision platform at the Shanghai EBIT Laboratory**
R. Hutton, Z. Chen, X. Wang, B. Wei, D. Lu, X. Zhang, Y. Zou
 (Modern Physics Institute, Fudan University)
- P18 The external complex scaling method in prolate spheroidal coordinates applied to the electron impact ionization of molecular hydrogen**
 V. Serov, B. Joulakian
 (Université Paul Verlaine-Metz France)
- P19 Carbon 1s electron momentum spectroscopy of acetone**
M. Yamazaki, N. Watanabe, D. B. Jones, M. Takahashi
 (IMRAM, Tohoku University)
- P20 Differential cross sections for the dissociative single and double excitations resulting in H(2p) formation in electron-CH₄ collisions - the proposal of a universal curve**
K. Yachi, T. Odagiri, L. Ishikawa, T. Nakazato, T. Tsuchida, N. Ohno, M. Kitajima, N. Kouchi
 (Department of Chemistry, Tokyo Institute of Technology)
- P21 Double differential cross sections and generalized oscillator strength distributions of ammonia**
K. Yamamoto, K. Nogami, Y. Hino, Y. Sakai
 (Department of Physics, Toho University)
- P22 Relativistic K-shell double ionization of atoms**
R. Choubisa, M. Jain
 (Birla Institute of Technology and Science)
- P23 Generalized oscillator strength of nitric oxide for the valence shell excitations by impact energy of 200 eV**
T. Sugihara, M. Suzuki, H. Miyawaki, Y. Sakai
 (Department of Physics, Toho University)
- P24 Electron interference in ionization of H₂: frequency parameter for first and second order process**
L. C. Tribedi, D. Misra, S. Chatterjee, A. Agnihotri
 (Tata Institute of Fundamental Research)
- P25 Calculation of (e, 2e) triple differential cross sections of Mg in coplanar geometry**
G. Purohit, V. Patidar, K. K. Sud
 (Sir Padampat Singhanian University)

- P26 Scattering angle interference in proton-deuterium-collisions**
M. Waitz, F. Trinter, H.-K. Kim, J. Titze, M. S. Schöffler, T. Jahnke, A. Czasch, O. Jagutzki, L. Ph. H. Schmidt, H. Schmidt-Böcking, R. Dörner
(Institut für Kernphysik Frankfurt, Goethe-University)
- P27 Dynamic correlation in the electron angular distribution in ionization of helium by ion impact**
J.M. Monti, O.A. Fojón, J. Hanssen, R.D. Rivarola
(Instituto de Física Rosario (CONICET-UNR))
- P28 Electron dynamic screening in atomic collisions**
J.M. Monti, O.A.Fojón, J.Hanssen, R.D.Rivarola
(Instituto de Física Rosario (CONICET-UNR))
- P29 Production of Coster-Kronig electrons from fast projectile C⁺, N⁺ and O⁺ ions in collisions with He**
K. Kawatsura, K. Takahiro, M. Sataka, M. Imai, H. Sugai, K. Kawaguchi, T. Yoshimori, H. Shibata, K. Komaki
(Kansai Gaidai University)
- P30 Development of time-of-flight mass spectrometer combined with ion attachment method**
K.Takaya, Y.Deguchi, T.Namiki, S.Nomoto, Y.Sakai
(Department of physics, Toho University)
- P31 Coherence and partial localization in electron emission from HeH⁺ molecular ions**
C. A. Tachino, M. E. Galassi, F. Martín, R. Rivarola
(Instituto de Física Rosario, CONICET - Universidad Nacional de Rosario)
- P32 Interference effects in single electron ionization of diatomic molecules by fast ion impact**
C. A. Tachino, M. E. Galassi, F. Martín, R. D. Rivarola
(Instituto de Física Rosario, CONICET - Universidad Nacional de Rosario)
- P33 Charge rearrangement and dissociation dynamics of rare gas dimer multiply ionized by highly charged ion**
J. Matsumoto, K. Hayakawa, H. Shiromaru, A. Leredde, X. Flechard, J. Rangama, D. Hennecart, T. Muranaka, A. Cassimi
(Tokyo Metropolitan University)
- P34 Search for differences in the ionization dynamics of H₂ and D₂**
F. Trinter, M. Waitz, J. Titze, M. S. Schöffler, M. Kühnel, O. Jagutzki, H. Kim, L. Ph. H. Schmidt, H. Schmidt-Böcking, R. Dörner
(Institut für Kernphysik, Goethe-Universität)
- P35 Double-Auger emission of carbon monoxide following core-excitation and ionization**
F. Trinter, M. S. Schoeffler, T. Jahnke, I. A. Bocharova, A. Vredenburg, R. Guillemin, F. P. Sturm, N. Neumann, K. Cole, J. B. Williams, M. Simon, A. Landers, T. Weber, R. Doerner
(Institut für Kernphysik, Goethe-Universität)
- P36 Peculiarities of fast capture processes at milliradian scattering angles**
S. Houamer, Yu.V. Popov, C. Dal Cappello
(NPI, Moscow State University)
- P37 Model treatment of two-photon double ionization of atoms by ultrashort x radiation fields**
O. Chuluunbaatar, H. Bachau, Yu.V. Popov, B. Piraux, K. Stefańska
(NPI, Moscow State University)
- P38 Two-dimensional Penning ionization electron spectroscopy of open-shell organometallic compounds, Ni(η^5 -C₅H₅)₂ and V(η^5 -C₅H₅)₂**
N. Kishimoto, M. Kimura, K. Ohno
(Department of Chemistry, Graduate School of Science, Tohoku University)
- P39 A scanning tunneling microscopic study of tricyclic aromatic compounds on a graphite surface: nano-scale self assemblies of anthracene, phenazine, and 1,10-phenanthroline molecules on HOPG**
N. Kishimoto, N. Akazawa, K. Ohno
(Department of Chemistry, Graduate School of Science, Tohoku University)
- P40 Development of apparatus for Auger electron - ion coincidence spectroscopy and Auger electron - Auger electron coincidence spectroscopy in gas phase using 5-keV**

- electron gun**
T. Kakiuchi, S. Inoue, M. Tahara, T. Itoh, H. Kubota, Y. Nakazato, K. Mase, S. Nagaoka
 (Faculty of Science, Ehime University)
- P41 Electron pair emission from a Cu(111) surface**
 R. S. Dhaka, G. van Riessen, Z. Wei, F. O. Schumann, J. Kirschner
 (Max-Planck-Institut für Mikrostrukturphysik)
- P42 Dynamics of proton desorption from solid surfaces excited with slow multi-charge ions**
K. Motohashi
 (Department of Biomedical Engineering, Toyo University)
- P43 Auger electron spectra of hydrogenated Si(111) obtained with Auger electron photoelectron coincidence measurements**
 T. Yamazaki, S. Hashimoto, T. Kakiuchi, K. Mase, M. Tanaka
 (IMSS, KEK)
- P44 Site-selective ion desorption from CF₃CH₂OH dissociatively chemisorbed on Si(111) studied with photoelectron photoion coincidence (PEPICO) measurements**
 T. Yamazaki, S. Hashimoto, K. Mase, T. Kakiuchi, S. Nagaoka, M. Tanaka
 (IMSS, KEK)
- P45 Double photoemission illuminates the Auger process**
Z. Wei, G. van Riessen, R. S. Dhaka, C. Winkler, F. O. Schumann, J. Kirschner
 (Max-Planck-Institut für Mikrostrukturphysik)
- P46 Multiphoton processes of atoms and molecules by EUV-FEL pulses at SPring-8**
A. Yamada, H. Fukuzawa, K. Motomura, C. Wang, X.-J. Liu, M. Okunishi, K. Ueda, K. Nagaya, H. Iwayama, A. Sugishima, Y. Mizoguchi, M. Yao, N. Saito, A. Rudenko, L. Foucar, M. Kurka, K.-U. Kühnel, Y. H. Jiang, R. Moshhammer, J. Ullrich, O. Herrwerth, M. Lezius, M. Kling, A. Czasch, R. Dörner, R. Feifel, P. Piseri, T. Mazza, M. Devetta, M. Coreno, A. Belkacem, K. L. Ishikawa, E. V. Gryzlova, S. I. Strakhova, A. N. Grum-Grzhimailo, N. M. Kabachnik, M. Nagasono, A. Higashiya, K. Tono, M. Yabashi, T. Ishikawa, H. Ohashi, H. Kimura, T. Togashi, Y. Senba
 (IMRAM, Tohoku University)
- P47 Three-photon sequential triple ionization of Ne**
E.V. Gryzlova, A. Rouzée, P. Johnsson, H. Fukuzawa, A. Yamada, K. Ueda, A.N. Grum-Grzhimailo, N.M. Kabachnik, S. Fritzsche, S.I. Strakhova, W. Siu, Y. Huismans, M.J.J. Vrakking
 (Institute of Nuclear Physics, Moscow State University)
- P48 Dissociative double ionization of formic acid in intense laser fields**
C. Wang, D. Ding, M. Okunishi, Z.-G. Wang, X.-J. Liu, G. Prümper, K. Ueda
 (IMRAM, Tohoku University; IAMP, Jilin University)
- P49 Polarization dependence of ionization dynamics of ethanol in intense laser fields**
H. Akagi, T. Otobe, R. Itakura, K. Hosaka, K. Yamanouchi, A. Yokoyama
 (Japan Atomic Energy Agency)
- P50 Differential cross sections for non-sequential double ionization of He by 52 eV photons at FLASH**
M. Kurka, J. Feist, D.A. Horner, A. Rudenko, Y.H. Jiang, K.U. Kühnel, L. Foucar, T.N. Rescigno, C.W. McCurdy, R. Pazourek, S. Nagele, M. Schulz, O. Herrwerth, M. Lezius, M.F. Kling, M. Schöffler, A. Belkacem, S. Düsterer, R. Treusch, B.I. Schneider, L.A. Collins, J. Burgdörfer, C.D. Schröter, R. Moshhammer, J. Ullrich
 (MPI-K Heidelberg)
- P51 Time-resolved two-photon double ionization of D₂ by XUV pump-probe experiments at FLASH**
Y.H. Jiang, A. Rudenko, J. F. Pérez-Torres, O. Herrwerth, L. Foucar, M. Kurka, K.U. Kühnel, M. Toppin, E. Plósiat, F. Morales, F. Martín, M. Lezius, M.F. Kling, T. Jahnke, R. Dörner, J. L. Sanz-Vicario, J. van Tilborg, A. Belkacem, M. Schulz, K. Ueda, T. J. M. Zouros, S. Düsterer, R. Treusch, C.D. Schröter, R. Moshhammer, J. Ullrich
 (Max-Planck-Institut für Kernphysik)
- P52 Angle-resolved rescattering-electron spectra of O₂ and CO₂ molecules induced by ultra-short intense laser pulses**
M. Okunishi, H. Niikura, T. Morishita, R.R. Lucchese, K. Ueda
 (IMRAM, Tohoku University)
- P53 Interatomic Coulombic decay and electron transfer mediated decay after triple**

- photoionization of Ar dimer**
I. Higuchi, T. Ouchi, K. Sakai, H. Fukuzawa, K. Ueda, H. Iwayama, K. Nagaya, M. Yao, D. Zhang, D. Ding, M. Schöffler, T. Mazza, Y. Tamenori, N. Saito, S.D. Stoychev, A.I. Kuleff, L.S. Cederbaum
(JASRI)
- P54 Multiply charged transition metals from organometallic compounds under intense femtosecond laser fields**
T. Yatsunami, E. Murakami, N. Nakashima
(Graduate School of Science, Osaka City University; PRESTO, JST)
- P55 Photoelectron spectroscopy of strontium**
E. Sokell, S. Safgren, M. Grimm, P. Sheridan
(University College Dublin)
- P56 Dissociative photoionization of perfluorocyclobutane and cis-hexafluorocyclobutane**
K. Okada, M. Sakai, T. Nakashima, A. Suemitsu, C. Huang, H. Yagi, H. Katayanagi, K. Mitsuke, K. Tabayashi
(Department of Chemistry, Hiroshima University)
- P57 Time-resolved photoelectron imaging using a femtosecond UV laser and a VUV free-electron laser**
S. Y. Liu, Y. Ogi, T. Fuji, K. Nishizawa, T. Horio, T. Mizuno, H. Kohguchi, M. Nagasono, T. Togashi, K. Tono, M. Yabashi, Y. Senba, H. Ohashi, H. Kimura, T. Ishikawa, T. Suzuki
(RIKEN)
- P58 Three-body breakup amplitude for short range potential using Sturmian basis set**
A. L. Frapiccini, J. M. Randazzo, F. D. Colavecchia, G. Gasaneo
(Centro Atómico Bariloche)
- P59 The photodissociation dynamics of H₂O after recapture process via Auger decay of O 1s inner-shell excitation**
T. Gejo, M. Oura, M. Kuniwake, K. Honma, J. R. Harries
(University of Hyogo)
- P60 Semiclassical treatment of double photoionization of helium based on the scattering matrix formulation**
N. N. Choi
(School of Natural Science, Kumoh National Institute of Technology)
- P61 Time dependent studies of H₂ dissociation with phase stabilized laser pulses**
M. Kremer, B. Fischer, V. Sharma, B. Feuerstein, T. Pfeifer, C. D. Schröter, R. Mohammer, J. Ullrich
(Max-Planck Institut für Kernphysik)
- P62 Interatomic Coulombic decay of Ne-Ar dimers following Auger decay**
T. Ouchi, K. Sakai, I. Higuchi, H. Fukuzawa, X.-J. Liu, M. Okunishi, K. Ueda, H. Iwayama, K. Nagaya, M. Yao, D. Zhang, D. Ding, M. Schöffler, T. Mazza, Y. Tamenori, N. Saito
(IMRAM, Tohoku University)
- P63 Evolution of shakeup satellite lines in photoionization**
T. Mukoyama, L. Kövér
(Institute of Nuclear Research of the Hungarian Academy of Sciences (ATOMKI))
- P64 Nondipole photoemission from chiral enantiomers of camphor**
K.P. Bowen, W.C. Stolte, J.A. Young, I.N. Demchenko, R. Guillemin, O. Hemmers, M.N. Piancastelli, D.W. Lindle
(Department of Physics and Astronomy, Uppsala University)
- P65 Laser control of electronic rotation dynamics in molecules based on the density matrix method**
H. Mineo, Y. Teranishi, M. Yamaki, S.D. Chao, Y. Fujimura, S.H. Lin
(Institute of Applied Mechanics, National Taiwan University)
- P66 Multiple photo-ionization and multiple Auger decay in simple molecules**
F. Penent, S. Carniato, J. Palaudoux, L. Andric, G. Gamblin, Y. Hikosaka, K. Ito, J.H.D. Eland, P. Lablanquie
(LCP-MR, CNRS and UPMC)
- P67 Clusters in intense XUV pulses: ionization heating and time-resolved imaging of cluster space-charge potentials**
Th. Fennel, M. Arbeiter
(University of Rostock)

- P68 Surface sensitive measurement of excitonic processes in rare gas clusters by electron energy loss spectroscopy**
H. Kubotera, T. Sekitsuka, S. Jinno, T. Tachibana, T. Hirayama
(Department of Physics, Rikkyo University)
- P69 Studies on interaction of clusters with intense EUV-FEL pulses at SPring8**
K. Nagaya, H. Iwayama, A. Sugishima, Y. Mizoguchi, S. Yase, H. Murakami, M. Yao, H. Fukuzawa, K. Motomura, A. Yamada, C. Wang, X.-J. Liu, K. Ueda, N. Saito, A. Rudenko, L. Foucar, M. Kurka, K.-U. Kühnel, J. Ullrich, A. Czasch, R. Dörner, R. Feilfel, P. Piseri, T. Mazza, M. Devetta, M. Coreno, A. Belkacem, M. Nagasono, A. Higashiya, K. Tono, M. Yabashi, T. Ishikawa, H. Ohashi, H. Kimura, T. Togashi, Y. Senba
(Kyoto University)
- P70 Measuring phase transition temperature of fragmented C₆₀ molecule via momentum distributions of fragments**
D. B. Qian, X. Ma, Z. Chen, D. C. Zhang, S. F. Zhang, B. Li, X. L. Zhu, W. T. Feng
(Institute of Modern Physics, Chinese Academy of Sciences)
- P71 CH-O interaction in small acetaldehyde clusters studied with core-electron excitation spectroscopy in the carbon K-edge region**
K. Tabayashi, Y. Tsutsumi, M. Chohda, Y. Tamenori, I. Higuchi, I. H. Suzuki, S. Nagaoka, T. Gejo, K. Honma
(HSRC, Hiroshima University)
- P72 Electron impact ionization of small argon clusters**
T. Pflueger, A. Senftleben, X. Ren, A. Dorn, J. Ullrich
(Max Planck Institute for Nuclear Physics)
- P73 Angular distributions of neon K-shell photoelectrons and ICD electrons emitted after Auger decay in Ne clusters**
K. Sakai, H. Fukuzawa, X.-J. Liu, M. Okunishi, K. Ueda, H. Iwayama, K. Nagaya, M. Yao, I. H. Suzuki, Y. Morishita, N. Saito, I. Higuchi, Y. Tamenori
(IMRAM, Tohoku University)
- P74 Understanding intensities and angular distributions of molecular Auger electrons by means of the one-centre approximation**
R. F. Fink
(University of Würzburg)
- P75 Effects of the reduction of the dimension of a system upon spin ordering in a degenerate electron gas**
F. E. Orlenko, E.V. Orlenko, G.G. Zegrya
(StPSPU, St.Petersburg State Polytechnic University)
- P76 Soliton excitations in the one-dimensional S=1 pseudo-Heisenberg antiferromagnetic chain**
F. E. Orlenko, E.V. Orlenko, G.G. Zegrya
(StPSPU, St.Petersburg State Polytechnic University)
- P77 Kohn-Sham potentials for fullerenes**
Y. Pavlyukh, J. Berakdar
(Martin-Luther-University Halle-Wittenberg)
- P78 Freezing of electron tunneling in dissociating inversion symmetric molecules**
B. Langer, K. Ueda, U.Becker
(Fritz-Haber-Institut der MPG)
- P79 Nuclear reactions induced by a heavy leptonic particle in the big-bang nucleosynthesis**
Y. Kino, M. Kamimura, E. Hiyama
(Department of Chemistry, Tohoku University)
- P80 Triple coincidence measurements of positron annihilation gamma rays in positronium-O₂ collisions**
H. Nihei, Y. Kino, T. Sekine
(Department of Chemistry, Tohoku University)
- P81 Atomic electron contributions to gamma-ray spectra of positron annihilation in noble gases**
F. Wang, L. Selvam, G. F. Gribakin, C. M. Surko
(CMS, Swinburne University of Technology)
- P82 Spectroscopic properties of quartz glasses**
M. K. Salakhitdinova, A. A. Usupov

(Samarkand State University)

P83

Multicoincidence 3-D momentum spectroscopy of linear molecules

S. L. Sorensen, D. Céolin, M. Gisselbrecht, J. Laksman, E. Månsson, A. Sankari
(SLF, Physics Dept., Lund University)

P84

Asymmetric molecular-frame photoelectron angular distributions for O 1s photoemission from CO₂ molecules

H. Fukuzawa, R. R. Lucchese, X.-J. Liu, T. Teranishi, K. Sakai, G. Prümper, M. Schöffler, K. Kreidi, H. Iwayama, K. Nagaya, M. Yao, Y. Tamenori, Y. Morishita, N. Saito, and K. Ueda
(IMRAM, Tohoku University)