



Photonic, Electronic and Atomic Collisions, Proceedings of the XXII International Conference

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Description: This continuing series of biennial international conferences promotes the growth and exchange of scientific information on photonic, electronic and atomic collisions and such related areas of atomic and molecular physics that the governing bodies of the conference shall from time to time select.

Photons

- ◆ H. K. Haugen (Canada), Review lecture: Single and Multiphoton Detachment Studies of Atomic Negative Ions Near Threshold
- ◆ U. Heinzmann (Germany), Review lecture: Spin Polarization and Dichroism Effects in Photoionization of Atoms and Molecules
- ◆ H. Yamaoka (Japan), Progress report: Photoionization of Singly and Multiply Charged Ions Following Inner- Shell Excitation at SPring-8
- ◆ H. Stapelfeldt (Denmark), Review lecture: Controlling the Orientation of Molecules by Strong Laser Fields
- ◆ D. Mathur (India), Progress report: Propensity of Molecules to Spatially Align in Polarized, Intense Light Fields
- ◆ T. Suzuki (Japan), Progress report: Femtosecond Time-Resolved Photoelectron Imaging on Ultrafast Molecular Dynamics
- ◆ W. C. Stwalley (United States), Review lecture: Production of Ultracold Ground-State Potassium Molecules
- ◆ R. Jongma (The Netherlands), Progress report: Deceleration and Trapping of Neutral Dipolar Molecules
- ◆ G. A. Raithel (United States), Progress report: L-Changing Collisions in Cold Rydberg Gases
- ◆ P. Lablanquie (France), Progress report: Studies of Double Photoionization in Atoms and Molecules
- ◆ A. Ehresmann (Germany), Progress report: Photodissociation Processes of Small Molecules Investigated by High-Resolution VUV Fluorescence
- ◆ R. E. Continetti (United States), Progress report: Anion Dissociation Dynamics by Photoelectron Photofragment Coincidence Studies
- ◆ G. Comtet (France), Progress report: Selective Photon Induced Surface Bond Breaking
- ◆ A. Kheifets (Australia), Progress report: Close-Coupling Theory of the Two-Electron Atomic Ionization by the Photon and Electron Impact
- ◆ P. Hammond (Australia), Progress report: Radiative Decay of Doubly Excited States in Helium
- ◆ H. Kono (Japan), Progress report: Wave Packet Dynamics of Two-Electron Systems in Intense Laser Fields
- ◆ A. I. Magunov (Russia), Progress report: Interference Effects in Laser-Induced Structures and Autoionizing Atomic States
- ◆ A. Derevianko (United States), Progress report: Non-Dipole Effects in Photoionization of Rare Gas Atoms
- ◆ D. C. Ionescu (Germany), Progress report: Photoionization at Relativistic Energies

Leptons

- ◆ G. Laricchia (United Kingdom), Review lecture: Scattering of Positrons and Positronium by Atomic and Molecular Targets
- ◆ G. Gribakin (United Kingdom), Progress report: Positron Interaction with Atoms and Molecules: Scattering, Ps-Formation, Bound States, and Annihilation
- ◆ O. A. Fojon (Argentina), Progress report: Multiple Processes in High Energy Positron-Atom Collisions
- ◆ L. H. Andersen (Denmark), Progress report: Electron Scattering on Negative Ions
- ◆ I. F. Schneider (France), Progress report: Theory of H₃⁺ Dissociative Recombination: Channel Mixing Effects
- ◆ A. Danjo (Japan), Progress report: Differential Cross Sections for Elastic and Inelastic Scattering of Electrons from Multiply Charged Ions
- ◆ E. Silver (United States), Progress report: Laboratory Astrophysics Studies with a Microcalorimeter on an Electron Beam Ion Trap
- ◆ K. H. Becker (United States), Review lecture: Progress in the Experimental Study of Electron-Molecule Interactions
- ◆ T. N. Rescigno (United States), Progress report: Theoretical Studies of Excitation in Low-Energy Electron- Molecule Collisions
- ◆ D. Field (Denmark), Progress report: Cold Collisions of Electrons with Molecules
- ◆ M. J. Brunger (Australia), Progress report: High-Resolution Electron Momentum Spectroscopy of Molecules
- ◆ K. Furuya (Japan), Progress report: Dissociative Ionization of Polyatomic Molecules Accompanying Light Emission: Fragment Ion-Photon Coincidence (FIPCO) Measurements by Electron Impact
- ◆ Y. Zheng (Canada), Progress report: Present Status and Future Perspectives for Gas Phase Electron Momentum Spectroscopy
- ◆ S. Matt (Austria), Progress report: Kinetics and Energetics of Spontaneous and Electron-Induced Fragmentation of Molecular and Cluster Ions
- ◆ D. H. Madison (United States), Progress report: Recent Advances in the Theoretical Treatment of Atomic Ionization by Charged Particle Impact
- ◆ A. Dorn (Germany), Progress report: (e,3e) on Helium: Complete Picture in Momentum Space
- ◆ J. Rasch (United Kingdom), Progress report: Double-Excitation Processes: (e,2e) and (e,3e) on Helium
- ◆ A. J. Murray (United Kingdom), Progress report: Probing Electron Scattering Dynamics using Tunable Laser Radiation
- ◆ A. N. Grum-Grzhimailo (Russia), Progress report: Electron-Impact Excitation of Core-Excited Autoionizing States
- ◆ P. W. Zetner (Canada), Progress report: Alignment/Orientation Parameters and Cross Sections for Electron Scattering by Excited Barium Atoms
- ◆ G. Baum (Germany), Progress report: Spin Asymmetries in Elastic and Inelastic Scattering of Spin-Polarized Electrons from Spin-Polarized Caesium Atoms
- ◆ M. S. Pindzola (United States), Progress report: Time Dependent Dynamics of Atomic Systems

Heavy Particles

- ◆ P. Roncin (France), Progress report: Collision Spectroscopy at Insulator Surfaces
- ◆ X.-M. Tong (Japan), Progress report: Time-Dependent Density Functional Theory for Atomic Collisions: From Photons to Highly-Charged Ions
- ◆ K. Tökési (Hungary), Progress report: Scattering of Highly-Charged Ions at Microcapillaries
- ◆ A. V. Hamza (United States), Progress report: Nanostructures Formed via Intense, Ultrafast Electronic Excitation Using Highly Charged Ions
- ◆ D. S. Jin (United States), Progress report: Exploring a Quantum Degenerate Fermi Gas of Atoms
- ◆ B. Esry (United States), Progress report: Three-Body Recombination of Ultracold Atoms
- ◆ D. J. Heinzen (United States), Progress report: Molecules in a Bose-Einstein Condensate
- ◆ N. Balakrishnan (United States), Progress report: Chemistry at Ultracold Temperatures
- ◆ A. Cassimi (France), Progress report: Molecular Fragmentation Induced by Multicharged Ions Impact: Non- Coulombic Explosion and Three-Body Effects
- ◆ U. Thumm (United States), Progress report: Hybridization, Charge Exchange and Electron Emission in Ion Interactions with Surfaces, Buckyballs, and Thin Metallic Films
- ◆ T. Schlathöler (The Netherlands), Progress report: C60: Its Response to Energy Deposition by Highly- Charged Ions
- ◆ Y. Nakai (Japan), Progress report: Production of Heavy Fragment Ions (C60-2n1+,2+,3+) in Collisions of C60 with Fast Ions
- ◆ G. M. Sigaud (Brazil), Progress report: Projectile Electron Loss Processes in Fast Collisions with Neutral Targets
- ◆ R. M. Ali (United States), Progress report: Multielectron Processes in Low Energy Collisions of Multiply Charged Ions with Many-Electron Atoms
- ◆ T. G. Winter (United States), Progress report: Ionization and Electron Transfer in Ion-Atom Collisions Studied Using Sturmian Bases
- ◆ A. L. Godunov (United States), Progress report: Recent Advances in Excitation of Autoionizing States by Particle Impact
- ◆ D. R. Schultz (United States), Progress report: Advances in the Understanding and Application of Ion-Atom Collisions
- ◆ J. F. Babb (United States), Progress report: Theoretical and Experimental Studies of Line-Broadening in Alkali Metal Vapours
- ◆ L. Chen (France), Progress report: High Multiplicities of Electron Ejection and Fullerene Fragmentation in Highly Charged Ion on C60 Collisions
- ◆ H. C. Bryant (United States), Progress report: Experimental Study of the Three-Body Problem with H- Energetic Collisions
- ◆ T. Azuma (Japan), Review lecture: Resonant Coherent Excitation of Heavy Ions Channeled in a Crystal
- ◆ H.-J. Lüdde (Germany), Progress report: Quantum Mechanical Treatment of Ion-Atom Collisions with Many- Electron Atoms
- ◆ J.-Y. Chesnel (France), Progress report: Production of Hollow Lithium Atoms by Fast Ion Projectiles: Analogies with Photon Impact
- ◆ R. S. Hayano (Japan), Review lecture: Atomic Spectroscopy and Collisions Using Slow Antiprotons
- ◆ R. J. Hughes (United States), Review lecture: Quantum Computation with Trapped Ions and Quantum Cryptography
- ◆ R. Cote (United States), Progress report: Ultracold Ion-Atom Collisions

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