CURRICULUM VITAE

PERSONAL INFORMATION

Name: Emmanouil P. Benis
Date of Birth: 8 November 1970
Place of Birth: Kavala, Greece
Nationality: Greek
Citizenship: Greek (native)
Languages: English
Marital Status: Married

Address: Foundation for Research & Technology – Hellas,
Institute of Electronic Structure & Laser
P.O. Box 1385, Vassilika Vouton,
GR 71110 Heraklion (Crete), Greece

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EDUCATION

2001 Ph.D. in Atomic Physics - University of Crete, Greece (in collaboration with Kansas State University, USA)
Thesis title: *A novel high-efficiency paracentric hemispherical spectrograph for zero-degree Auger projectile spectroscopy*
1996 MSc in Physics - University of Crete, Greece
1993 BSc in Physics - Aristotle University of Thessaloniki, Greece

EMPLOYMENT

2007-present Associated (Application) Scientist C, Institute of Electronic Structure and Laser
2003-2007 Research Associate, Institute of Electronic Structure and Laser
2001-2003 Research Associate**,** Department of Physics**,** Kansas State University
1993-2000 Teaching Assistant and Laboratory Instructor, Department of Physics, University of Crete

RESEARCH

Ultra fast high intensity laser systems
- Multiphoton processes
- Strong field ionization
- Short wavelength generation
- Non-linear XUV phenomena
- Generation and characterization of ultra short pulses
- Attosecond science

Accelerator and Synchrotron based atomic and molecular physics

Resonant and non-resonant electron elastic scattering
Hollow ionic states
Metastable ion beams
Molecular dissociation
Photofragmentation

Instrumentation
Electron spectrometers

SKILLS

Engineering design
High and ultra high vacuum technology
Standard NIM and CAMAC electronics
Standard Laser optics components
Position Sensitive Detectors (Resistive, Backgammon and Delay Line Anodes)
Electrostatic spectrometers (hemispherical, parallel plate)
Time of flight spectrometers (mass spectrometer, electron magnetic field parallelizer)
Gas Cells, Pulsed Jets, Cold gas targets
Multi-fragment imaging techniques
High resolution Auger spectroscopy
Software development for data acquisition and data analysis
SIMION3D software for ion optics simulation expertise

REFEREE IN SCIENTIFIC JOURNALS

Phys. Rev. Lett.

FUNDING

80,000 Euros, Marie Curie International Reintegration Grants (IRG), FP6-2002-Mobility-12, 2003. Title: *Characterization and Research Applications of Attosecond Pulses.* Principal Investigators: Dr. E. Benis (IESL) & Prof. D. Charalambidis (IESL).

11,740 EU, Bilateral Scientific and Technological Cooperation between Greece and Hungary (Greek Ministry for Industry, Energy & Technology), 2004.Title: *Electron scattering processes in Ion-atom collisions*. Principal Investigators: Prof. Theo Zouros (IESL) - Dr. Bela Sulik ATOMKI, Debrecen.

CONFERENCES ORGANIZATION

Member of the local organizing committee in

- 9th European Conference on Atoms Molecules and Photons, ECAMP IX 2007
- 20th International Symposium on Ion-Atom Collisions, XX ISIAC 2007

PUBLICATIONS

INVITED REVIEW ARTICLES - REFERRED

1. T.J.M. Zouros, **E.P. Benis**, M. Zamkov, C.D. Lin, T.G. Lee, P. Richard, T.W. Gorczyca, T. Morishita, *Investigation of triply-excited states of Li--like ions in fast ion-atom collisions by zero-degree Auger projectile electron spectroscopy*, Nucl. Instr. & Meth. in Phys. Res. B 233, 161 (2005).
2. T.J.M. Zouros, **E.P. Benis**, T.W. Gorczyca, A.D. Gonzalez, M. Zamkov, and P. Richard, *Differential electron scattering from positive ions measured by zero-degree ion-atom spectroscopy*, Nucl. Instr. & Meth. in Phys. Res. B 205, 508-516 (2003).
3. T. J. M. Zouros and **E.P. Benis**, *The hemispherical deflector analyzer revisited: I. Motion in the ideal 1/r potential, generalized entry conditions, Kepler orbits and spectrometer basic equation*, Journal of Electron Spectroscopy and Related Phenomena, 125, 221-248 (2002).

PUBLICATIONS IN REFERRED INTERNATIONAL JOURNALS

4. P. Tzallas, E. Skantzakis, C. Kalpouzos, **E.P. Benis**, G.D. Tsakiris and D. Charalambidis, *Generation of intense continuum XUV radiation by many cycle laser fields*, Nature Physics 3, 846 (2007).
5. P. Tzallas, E. Skantzakis, **E.P. Benis**, A. Bonarou, G.D. Tsakiris, and D. Charalambidis, *Full temporal reconstruction of a lower order harmonic superposition*, New J. Phys. 9, 232 (2007).
6. V. Loriot, P. Tzallas, **E.P. Benis**, E. Herz, B. Lavorel, D. Charalambidis and O. Faucher, *Laser-induced field free alignment of OCS molecule*, J. Phys. B 40, 2503 (2007).
7. F. Martin, J. Fernandez, T. Havermeier, L. Foucar, Th. Weber, K. Kreidi, M. Schoffer, L. Schmidt, T. Jahnke, A.L. Landers, O. Jakutzki, A. Czasch, **E.P. Benis**, T. Osipov, A. Belkacem, M.H. Prior, H. Schmidt-Böcking, C.L. Cocke, and R. Dörner, *Single photon induced symmetry breaking of H_2 dissociation*, Science 315, 629 (2007).
8. **E.P. Benis**, D. Charalambidis, T.N. Kitsopoulos, G.D. Tsakiris, and P. Tzallas, *Two-photon double ionization of rare gases by a superposition of harmonics*, Phys. Rev. A 74, 051402R (2006).
9. D. Charalambidis, P. Tzallas, N.A. Papadogiannis, L.A.A. Nikolopoulos, **E.P. Benis**, and G.D. Tsakiris, *Comment on "Photoionization of helium atoms irradiated with intense vacuum ultraviolet free-electron laser light. Part I. Experimental study of multiphoton and single-photon processes"*, Phys. Rev. A 74, 037402 (2006). [Selected for the October 2006 issue of Virtual Journal of Ultrafast Science].
10. **E.P. Benis**, P. Tzallas, L.A.A. Nikolopoulos, M. Kovacev, C. Kalpouzos, D. Charalambidis and G.D. Tsakiris, *Frequency resolved photoelectron spectra of two-photon ionization of He by an attosecond pulse train*, New J. Phys. 8, 92 (2006).

11. E. Papalazarou, M. Kovacev, P. Tzallas, **E.P. Benis**, C. Kalpouzos, G.D. Tsakiris, and D. Charalambidis, *Spectral phase distribution retrieval through coherent control of harmonic generation,* Phys. Rev. Lett. 96, 163901 (2006).). [Selected for the May 2006 issue of Virtual Journal of Ultrafast Science].

12. **E.P. Benis**, T.J.M. Zouros, T.W. Gorczyca, A.D. Gonzalez and P. Richard, *Erratum to: Elastic resonant and non-resonant differential scattering of quasi-free electrons from* $B^{4+}(1s)$ *and* $B^{3+}(1s^2)$ *ions*, Phys. Rev. A 73, 029901 (2006).

13. P. Tzallas, **E.P. Benis**, D. Charalambidis, G.D. Tsakiris, K. Witte, and L.A.A. Nikolopoulos, *Attosecond pulse trains: generation metrology and application perspectives,* Laser Phys 15, 821, (2005).

14. T.J.M. Zouros, **E.P. Benis**, and I. Chatzakis, *Optimization of the energy resolution of an ideal ESCA-type hemispherical analyzer,* Nucl. Instr. & Meth. in Phys. Res. B 235, 535 (2005).

15. P. Tzallas, G.D. Tsakiris, L.A.A. Nikolopoulos, N.A. Papadogiannis, K. Witte, **E.P. Benis**, and D. Charalambidis, *The attosecond science frontiers: generation, metrology and paths to applications,* Journal of Electron Spectroscopy and Related Phenomena 144-147, 1129 (2005).

16. T. J. M. Zouros and **E.P. Benis**, *Erratum to: The hemispherical deflector analyzer revisited: I. Motion in the ideal 1/r potential, generalized entry conditions, Kepler orbits and spectrometer basic equation,* Journal of Electron Spectroscopy and Related Phenomena, 142, 175-176 (2005).

17. L.A.A. Nikolopoulos, **E.P. Benis**, P. Tzallas, D. Charalambidis, K. Witte, and G. D. Tsakiris, *On the second order autocorrelation of an XUV attosecond pulse train,* Phys. Rev. Lett. 94, 113905, (2005). [Selected for the April 2005 issue of Virtual Journal of Ultrafast Science].

18. T.J.M. Zouros and **E.P. Benis**, *Optimal energy resolution of a hemispherical analyzer with virtual entry,* Applied Physics Letters 86, 094105 (2005).

19. **E.P. Benis**, J.F. Xia, X.M. Tong, M. Faheem, M. Zamkov, B. Shan, P. Richard, C.D. Lin and Z. Chang, *Ionization suppression of* Cl_2 *molecules in intense laser fields,* Phys. Rev. A 70, 025401 (2004) [selected for the September 2004 issue of Virtual Journal of Ultrafast Science].

20. T. Jahnke, L.Foucar, J.Titze, R Wallauer, T. Osipov, **E.P. Benis**, A Alnaser, O. Jacutzki, W. Arnold, S.K. Semenov, N.A. Cherepkov, L. Schmidt, A. Czasch, A. Staudte, M. Schoffler, C.L. Cocke, M.H. Prior, H. Schmidt-Bocking, and R. Doerner, *Vibrationally resolved K-shell photoionization of CO with circularly polarized ligh*, Phys. Rev. Lett. 93, 083002 (2004).

21. **E.P. Benis**, T.J.M. Zouros, T.W. Gorczyca, A.D. Gonzalez and P. Richard, *Elastic resonant and non-resonant differential scattering of quasi-free electrons from* $B^{4+}(1s)$ *and* $B^{3+}(1s^2)$ *ions*, Phys. Rev. A 69, 052718 (2004).

22. A.S. Alnaser A. Landers, D.J. Pole, S. Hossain, **E.P. Benis,** S.M. Ferguson, and J.A. Tanis, *Electron correlation in the formation of Li-like ions,* Physica Scripta T110, 137 (2004).

23. A.S. Alnaser, T. Osipov, **E.P. Benis**, A. Wech, C. L. Cocke, X. M. Tong, and C. D. Lin, *Rescattering Double Ionization of D_2 and H_2 by Intense Laser Pulses*, Phys. Rev. Lett. 91, 163002, (2003).

24. **E.P. Benis**, T.J.M. Zouros, T.W. Gorczyca, M. Zamkov, and P. Richard *Isoelectronic study triply excited state Li-like states*, J. Phys. B 36, L341 (2003).

25. T.J.M. Zouros, **E.P. Benis**, and T.W. Gorczyca, *Large-angle elastic resonant and non-resonant scattering of electrons from $B^{3+}(1s^2)$ and $B^{4+}(1s)$ ions: Comparison of experiment and theory*, Phys. Rev. A 68, R010701 (2003).

26. M. Zamkov, **E.P. Benis**, C.D. Lin, T.G. Lee, T. Morishita, P. Richard and T.J.M. Zouros, *Experimental observation and theoretical calculations of triply excited $2s2p^2$ $^2S^e$, $^{2,4}P^e$, $^2D^e$, and $2p^3$ $^2P^o$, $^2D^o$ states of fluorine*, Phys. Rev. A. 67, R050703 (2003).

27. M. Zamkov, **E.P. Benis**, T.G. Lee, P. Richard, and T.J.M. Zouros, *Absolute measurements and calculation of triple electron capture in fast 0.5-1.1 MeV/u C^{6+} on Ar collisions*, Nucl. Instr. & Meth. in Phys. Res. B 205, 522-527 (2003).

28. **E.P. Benis**, M. Zamkov, P. Richard, and T.J.M. Zouros, *Comparison of two experimental techniques for the determination of the 1s2s ^3S metastable beam fraction in energetic B^{3+} ions*, Nucl. Instr. & Meth. in Phys. Res. B 205, 517-521 (2003).

29. M. Zamkov, **E.P. Benis**, P. Richard, T.G. Lee, and T.J.M. Zouros, *Triple electron capture in fast 0.5-1.1 MeV/u C^{6+} on Ar collisions*, Phys. Rev. A 66, 042714 (2002).

30. M. Zamkov, **E.P. Benis**, P. Richard, and T.J.M. Zouros, *Fraction of metastable 1s2s ^3S ions in fast He-like beams (Z=5-9) produced in collisions with carbon foils*, Phys. Rev. A 65, 062706 (2002).

31. **E.P. Benis**, T.J.M. Zouros, M. Zamkov, and P. Richard, *Technique for the determination of the 1s2s ^3S metastable fraction in two-electron ion beams*, Phys. Rev. A 65, 064701 (2002).

32. M. Zamkov, H. Aliabadi, **E.P. Benis**, P. Richard, H. Tawara and T.J.M. Zouros, *Absolute cross section formation of the triply excited $B^{2+}(2s2p^2\ ^2D)$ resonance in electron-metastable ion collisions*, Phys. Rev. A 65, 032705 (2002).

33. M. Zamkov, H. Aliabadi, **E.P. Benis**, P. Richard, H. Tawara, T.J.M. Zouros, *Energy dependence of the metastable fraction in $B^{3+}(1s^2\ ^1S,\ 1s2s\ ^3S)$ beams produced in collisions with solid and gas targets*, Phys. Rev. A 64, 052702 (2001).

34. **E.P. Benis** and T.J.M. Zouros, *Improving the Energy Resolution of a Hemispherical spectrograph using a Paracentric Entry at a Non-Zero Potential*, Nuclear Instr. & Meth. A., Letter to the editor 440, 462-5 (2000).

35. **E.P. Benis**, T.J.M. Zouros, H. Aliabadi and P. Richard, *Hemispherical analyser with 2-D PSD for zero-degree Auger projectile spectroscopy*, Physica Scripta T80B, 529-31 (1999).

36. **E.P. Benis**, T.J.M. Zouros and P. Richard, *High Resolution RTE Measurements at zero degrees using a Hemispherical Analyser with Lens and 2-D PSD*, Nucl. Instr. & Meth. in Phys. Res. B 154, 276-80 (1999).

37. **E.P. Benis**, K. Zaharakis, M. M. Voultsidou and T.J.M. Zouros, *A new hemispherical analyser with 2-D PSD and focusing lens for use in 0° electron spectroscopy*, Nucl. Instr. & Meth. in Phys. Res. B 146, 120-5 (1998).

38. T.J.M. Zouros, C. Liao, S. Hagmann, E.C. Montenegro, G. Toth, P. Richard and **E.P. Benis**, *Search for inelastic electrons scattered off ions in energetic ion-atom collisions*, Nucl. Instr. & Meth. in Phys. Res. B 98, 371-4 (1995).

IN PRINT

39. D. Charalambidis, P. Tzallas, **E.P. Benis**, and G. D.Tsakiris, *Attosecond scale multi-XUV-photon processes*, Springer (2008).

40. D. Charalambidis, P. Tzallas, **E.P. Benis**, G. Maravelias, L.A.A. Nikolopoulos and G.D. Tsakiris, *Exploring and exploiting intense attosecond pulses*, submitted to New J. Phys. (2008).

SUBMITTED

41. T. Jahnke, J. Titze, L. Foucar, R. Wallauer, T. Osipov, **E.P. Benis**, A. Alnaser, O. Jagutzki, W. Arnold, L. Schmidt, A. Czasch, Th. Weber, A.L. Landers, A. Belkacem, C.L. Cocke, M. H. Prior, H. Schmidt-Böcking and R. Dörner, *Auger electron molecular frame angular distributions as a probe for molecular structure*, submitted to Phys. Rev. Lett. (2008).

PUBLICATIONS IN REFERRED INTERNATIONAL CONFERENCE PROCEEDINGS

42. **E.P. Benis**, A.A. Nikolopoulos, P. Tzallas, D. Charalambidis, K. Witte, and G.D. Tsakiris, *On the second order autocorrelation of an XUV attosecond pulse train*, XXIV ICPEAC Proc. (2007).

43. P. Tzallas, G.D. Tsakiris, K. Witte, L.A.A. Nikolopoulos, **E.P. Benis**, M. Kovacev, and D. Charalambidis, *Extending fs pulse metrology to attosecond XUV pulses*, Proc. SPIE Int. Soc. Opt. Eng. 5448, 538 (2004).

44. M. Zamkov, **E.P. Benis**, T.G. Lee, P. Richard, and T.J.M. Zouros, *Doubly excited KLL states formed in triple electron capture*, AIP Conf. Proc. 680, 24 (2003).

45. T.J.M. Zouros, **E.P. Benis**, A.D. Gonzalez, T.G. Lee, P. Richard, and T.W. Gorczyca, *Resonant (RTE) and Non Resonant (NTE) Transfer Excitation in 4 MeV B^{4+} collisions with H_2, He and Ar studied by zero-degree Auger projectile electron spectroscopy*, AIP Conf. Proc. 680, 36 (2003).

46. A.S. Alnaser, A. Landers, D.J. Pole, S. Hossain, **E.P. Benis**, S.M. Ferguson, and J.A. Tanis, *Electron correlation leading to double K-shell vacancies in Li-like ions*, AIP Conf. Proc. 680, 77 (2003).

47. **E.P. Benis**, M. Zamkov, P. Richard, T.J.M. Zouros, and K. R. Karim, *Production of the $2s2p^2\ ^2D^e$ triply excited state in collisions of quasi-free electrons with He-like B^{3+}, C^{4+}, N^{5+}, O^{6+}, and F^{7+} ions*, AIP Conf. Proc. 680, 168 (2003).

48. M. Zamkov, H. Aliabadi, **E.P. Benis**, P. Richard, H Tawara and T.J.M. Zouros, *Stripping energy dependence of a $B^{3+}(1s^2\ ^1S,\ 1s2s\ ^3S)$ beam metastable fraction*, AIP Conf. Proc. 576, 149 (2001).

49. T.J.M. Zouros, **E.P. Benis** and J.E. Schauer, *Charged particle trajectories in an ideal paracentric hemispherical deflection analyser*, AIP Conf. Proc. 576, 76 (2001).

INVITED TALKS IN INTERNATIONAL CONFERENCES

1. *Excited states of three-electron systems*, XVIII International Seminar on Ion-Atom Collisions, Stockholm, Sweden, 30 July -1 August 2003.
2. *Production of the $2s2p^2\ ^2D^e$ triply excited state in collisions of quasi-free electrons with He-like B^{3+}, C^{4+}, N^{5+}, O^{6+}, and F^{7+} ions*, 17th International Conference on the Application of Accelerators in Research and Industry, Denton, Texas, USA, 12-16 November 2002.
3. *Absolute doubly differential cross section measurements for 180° resonant elastic scattering of quasi-free electrons on B^{3+} ions*, DAMOP02 meeting of The American Physical Society, Williamsburg, Virginia, USA, 29 May -1 June 2002.

ORAL PRESENTATIONS IN INTERNATIONAL CONFERENCES AND WORKSHOPS

1. *On the second order autocorrelation of an XUV attosecond pulse train*, XXIV International Conference on Photonic, Electronic, and Atomic Collisions, Rosario, Argentina, 20-26 July 2005 (special talk).
2. *Suppression of laser field ionization of Cl_2 molecule*, Conference on Super Intense Laser Atom Physics, Southfork Ranch, Dallas Texas, USA, 16-19 November 2003 (given by J.F. Xia).
3. *Developments towards frequency resolved XUV gating*, XTRA meeting Santorini, Greece, 14-17 October 2004.
4. *Towards frequency resolved XUV gating*, Symposium on attosecond generation and metrology, Ringberg castle, D-83700 Rottach-Egern, Germany, 4-7 April 2004.
5. *Charge state dependence of 0° binary encounter electron production in B^{q+} (q=2-5) in collisions with H_2*, DAMOP01 meeting of The American Physical Society, London, Ontario, Canada, 15-19 May 2001.
6. *$B^{3+}(2p^2\ ^1D)$ doubly-excited state formed in energetic collisions of B^{4+} + H_2 by resonant transfer and excitation*, DAMOP01 meeting of The American Physical Society, London, Ontario, Canada, 15-19 May 2001 (given for T.J.M. Zouros).

SEMINARS

1. *Non-linear XUV optics with and for attosecond pulses*, Max-Planck-Institut fur Quantenoptik, Garching, 29-03-2006
2. *Absolute doubly-differential cross section measurements for 180^0 elastic scattering of quasi-free electrons on B^{3+} ions*, Western Michigan University, Department of Physics, 18-02-2002.
3. *Absolute cross section measurements in metastable-ion atom collisions*, Kansas State University, Department of Physics, 06-02-2002.
4. *A new hemispherical spectrograph for use in zero-degree Auger projectile spectroscopy*, Kansas State University, Department of Physics, 18-04-2001.
5. *A novel high-efficiency paracentric hemispherical spectrograph for use in zero-degree Auger projectile spectroscopy*, Kansas State University, Department of Physics, 24-02-1999.

POSTER PRESENTATIONS IN INTERNATIONAL CONFERENCES

1. **E.P. Benis**, P. Tzallas, T.N. Kitsopoulos, G.D. Tsakiris, and D. Charalambidis, *Two photon double ionization of rare gases by a superposition of high order harmonics*, 20th International Symposium on Ion-Atom Collisions, Agios Nikolaos, Crete, Greece, 1-4 August 2007.
2. P. Tzallas,**E.P. Benis**, L.A.A. Nikolopoulos, O. Faucer, E. Skantzakis, G.D. Tsakiris, and D. Charalambidis, *Non-linear XUV processes @ fempto / atto-second temporal scales*, XXV International Conference on Photonic Electronic and Atomic Collisions, Freiburg, Germany, 25-31 July 2007.
3. **E.P. Benis**, J. Kruse, P. Tzallas, E. Skantzakis, G.D. Tsakiris, and D. Charalambidis, *Spatiotemporal effects in attosecond pulse train metrology*, 9th European Conference on Atoms Molecules and Photons, Heraklion, Crete, Greece, 6-11 May 2007.
4. **E.P. Benis**, P. Tzallas, G.D. Tsakiris, and D. Charalambidis, *Two photon direct double ionization: a non-linear medium for xuv metrology*, 9th European Conference on Atoms Molecules and Photons, Heraklion, Crete, Greece, 6-11 May 2007.
5. E. Skantzakis, P. Tzallas, E. Papalazarou, C. Kalpouzos, A. Bonarou, **E.P. Benis**, G.D. Tsakiris, and D. Charalambidis, *Full temporal reconstruction of lower order harmonic superposition*, 9th European Conference on Atoms Molecules and Photons, Heraklion, Crete, Greece, 6-11 May 2007.
6. P. Tzallas, E. Skantzakis, C. Kalpouzos, **E.P. Benis**, A. Bonarou, G.D. Tsakiris, and D. Charalambidis, *Towards intense isolated pulses*, 9th European Conference on Atoms Molecules and Photons, Heraklion, Crete, Greece, 6-11 May 2007.

7. F. Martín, J. Fernández, T. Havermeier, L. Foucar, Th. Weber, K. Kreidi, M. Schöffler, L. Schmidt, T. Jahnke, O. Jagutzki, A. Czasch, **E. P. Benis**, T. Osipov, A. L. Landers, A. Belkacem, M. H. Prior, H. Schmidt-Böcking, C. L. Cocke, R. Dörner, *Single photon-induced symmetry breaking of H_2 dissociation*, 9th European Conference on Atoms Molecules and Photons, Heraklion, Crete, Greece, 6-11 May 2007.

8. F. Martín, J. Fernández, T. Havermeier, L. Foucar, Th. Weber, K. Kreidi, M. Schöffler, L. Schmidt, T. Jahnke, O. Jagutzki, A. Czasch, **E. P. Benis**, T. Osipov, A. L. Landers, A. Belkacem, M. H. Prior, H. Schmidt-Böcking, C. L. Cocke, R. Dörner, *Single photon-induced symmetry breaking of H_2 dissociative ionization*, 9th European Conference on Atoms Molecules and Photons, Heraklion, Crete, Greece, 6-11 May 2007.

9. L.A.A. Nikolopoulos, **E.P. Benis**, P. Tzallas, D. Charalambidis, and G.D. Tsakiris, *Numerical ab-initio study of non-linear response of helium under an XUV radiation*, International Conference on Computational Methods in Sciences and Engineering, Loutraki, Korinthos, Greece, 21-26 October 2005.

10. L.A.A. Nikolopoulos, **E.P. Benis**, P. Tzallas, D. Charalambidis, K. Witte, and G.D. Tsakiris, *On the second order autocorrelation of an XUV attosecond pulse train*, XXIV International Conference on Photonic Electronic and Atomic Collisions, Rosario, Argentina, 20-26 July 2005.

11. **E.P. Benis**, L.A.A. Nikolopoulos, P. Tzallas, G.D. Tsakiris, and D. Charalambidis, *XUV attosecond pulses: generation, metrology, and potential applications*, XXIV International Conference on Photonic Electronic and Atomic Collisions, Rosario, Argentina, 20-26 July 2005.

12. T.J.M. Zouros and **E.P. Benis**, *Ultimate energy resolution of a hemispherical analyzer using a cylindrically symmetric injection lens and virtual entry aperture*, XXIV International Conference on Photonic Electronic and Atomic Collisions, Rosario, Argentina, 20-26 July 2005.

13. T.J.M. Zouros, **E.P. Benis**, and Pat Richard, *Zero-degree projectile electron spectroscopy of B^{2+} in 3-8 MeV collisions with H_2*, XXIV International Conference on Photonic Electronic and Atomic Collisions, Rosario, Argentina, 20-26 July 2005.

14. P. Tzallas, **E.P. Benis**, M. Kovacev, E. Papalazarou, L.A.A Nikolopoulos, G.D. Tsakiris, and D. Charalambidis, *On the generation metrology and applications of of XUV attosecond pulses*, XXI International Symposium on Molecular Beams, Hersonissos, Crete, 15-20 May 2005.

15. P. Tzallas, **E.P. Benis**, and D. Charalambidis, *High Intensity Coherence XUV Light Source*, Workshop on Ultra-high Intensity Interaction Plasma Emission Diagnostic, CCLRC Rutherford Appleton Laboratory, 4-5 April 2005.

16. T.J.M. Zouros, **E.P. Benis**, and I. Chatzakis, *Optimization of the energy resolution of an ideal ESCA-type hemispherical analyzer*, 12th International Conference on Highly Charged Ions, Vilnius, Lithuania, 6-3 September 2004.

17. **E.P. Benis**, T.J.M Zouros, T.W. Gorczyca, A.D. Gonzalez, and P. Richard, *Collisional energy dependence study for elastic scattering of quasi-free electrons from $B^{3+}(1s^2)$ ions*, XXIII International Conference on Photonic, Electronic, and Atomic Collisions, Stockholm, Sweden, 23-29 July 2003.

18. A.S. Alnaser, **E.P. Benis,** T. Osipov, A. Wech, C. Wyant, J. Stuhlman, E. Edgu-Fry, Z. Chang, B. Shan, and C. L. Cocke, *Rescattering Ionization of D_2 in intense laser field*, XXIII International Conference on Photonic, Electronic, and Atomic Collisions, Stockholm, Sweden, 23-29 July 2003.

19. A.S. Alnaser, A. Landers, D.J. Pole, S. Hossain, **E.P. Benis,** S. M. Ferguson, and J.A. Tanis, *Electron correlation in the formation of Li-like ions*, XXIII International Conference on Photonic, Electronic, and Atomic Collisions, Stockholm, Sweden, 23-29 July 2003.

20. **E.P. Benis**, T.J.M. Zouros, T.W. Gorczyca, M. Zamkov and P. Richard, *Isoelectronic (Z=5-9) study for the $2s2p^2\ {}^2D^e$ triply excited state formed in collisions of quasi-free electrons with He-like ions*, DAMOP03 meeting of The American Physical Society, Boulder, Colorado, USA, 21-24 May 2003.

21. T.J.M. Zouros, **E.P. Benis**, M. Zamkov and P. Richard, *Zero-degree Auger projectile spectroscopy of 1.5 MeV Li^+ ions on H_2 collisions*, DAMOP03 meeting of The American Physical Society, Boulder, Colorado, USA, 21-24 May 2003.

22. M. Zamkov, **E.P. Benis**, C.D. Lin, P. Richard, T.J.M Zouros, and T. Moroshita, *Study of triply excited $2s2p\ {}^2\ {}^2S$, ${}^{2,4}P$, ${}^2D$, and $2p\ {}^3\ {}^2P$, ${}^2D$ states of fluorine produced by triple electron capture*, DAMOP03 meeting of The American Physical Society, Boulder, Colorado, USA, 21-24 May 2003.

23. L.M. Foucar, M.H.Prior, M. Schöffler, L. Schmidt, H. Schmidt-Böcking, R. Dörner, A. Landers, T. Osipov, **E.P. Benis**, and C.L. Cocke, *Fragment Distributions From the Photo-ionization and Dissociation of Aligned H_2 and D_2 Molecules*, DAMOP03 meeting of The American Physical Society, Boulder, Colorado, USA, 21-24 May 2003.

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