

ΒΙΟΓΡΑΦΙΚΟ ΣΗΜΕΙΩΜΑ

ΠΡΟΣΩΠΙΚΑ ΣΤΟΙΧΕΙΑ

Όνοματεπώνυμο	Εμμανουήλ Μπενής
Ημερομηνία Γέννησης	8 Νοεμβρίου 1970
Τόπος Γέννησης	Καβάλα
Εθνικότητα / Υπηκοότητα	Ελληνική
Οικογενειακή κατάσταση	Έγγαμος, 2 παιδιά
Στρατιωτική κατάσταση	03/1999 -11/2000, σμηνίτης στην Πολεμική Αεροπορία.
Διεύθυνση επικοινωνίας	Τομέας Ατομικής και Μοριακής Φυσικής, Τμήμα Φυσικής, Πανεπιστήμιο Ιωαννίνων, Ιωάννινα, 45110.
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Web Page	http://users.uoi.gr/mbenis/index.htm

ΕΡΕΥΝΗΤΙΚΑ ΕΝΔΙΑΦΕΡΟΝΤΑ

- Ατομική/Μοριακή Φυσική με ισχυρούς παλμούς Laser
 - Γρήγορες διαδικασίες μοριακής φωτοδιάσπασης και φωτοϊονισμού.
 - Μη γραμμικές διαδικασίες στην φασματική περιοχή VUV/XUV.
 - Παραγωγή χαμηλής και υψηλής τάξης αρμονικών συχνοτήτων.
 - Μετρολογία υπερβραχέων παλμών - παλμοί αττοδευτερολέπτων.
- Ατομική/Μοριακή Φυσική με Επιταχυντές: Κρούσεις ταχέων ιόντων-ατόμων
 - Φασματοσκοπία Auger ηλεκτρονίων υψηλής διακριτικής ικανότητας.
 - Συντονισμένες και μη-συντονισμένες διαδικασίες ελαστικής σκέδασης ηλεκτρονίων.
 - Διαδικασίες σχηματισμού διπλά και τριπλά διεγερμένων ιοντικών καταστάσεων.
 - Μετασταθείς ιοντικές καταστάσεις.
- Ανάπτυξη και λειτουργία υψηλής διακριτικής ικανότητας και απόδοσης φασματόμετρων ηλεκτρονίων.

ΕΚΠΑΙΔΕΥΣΗ

06/2001	Διδακτορικό (PhD) στην Ατομική Φυσική – Πανεπιστήμιο Κρήτης (σε συνεργασία με το Kansas State University, USA). <i>Τίτλος Διατριβής: Πρωτότυπο παρακεντρικό ημισφαιρικό φασματόμετρο υψηλής απόδοσης για φασματοσκοπία Auger ηλεκτρονίων μηδέν μοιρών.</i>
07/1996	Μεταπτυχιακό δίπλωμα ειδίκευσης (MSc) στην Γενική Φυσική – Πανεπιστήμιο Κρήτης.
10/1993	Δίπλωμα Φυσικής (BSc) – Αριστοτέλειο Πανεπιστήμιο Θεσσαλονίκης.

ΕΡΕΥΝΗΤΙΚΕΣ / ΑΚΑΔΗΜΑΙΚΕΣ ΘΕΣΕΙΣ

10/2014 - Σήμερα	Μέλος Συνεργαζόμενου Εκπαιδευτικού Προσωπικού, Ελληνικό Ανοικτό Πανεπιστήμιο.
08/2013 - Σήμερα	Επίκουρος Καθηγητής (μόνιμος), Τμήμα Φυσικής, Πανεπιστήμιο Ιωαννίνων. Γνωστικό αντικείμενο: «Πειραματική Ατομική ή/και Μοριακή Φυσική».
10/2009 – 08/2013	Επίκουρος Καθηγητής (με θητεία), Τμήμα Φυσικής, Πανεπιστήμιο Ιωαννίνων. Γνωστικό αντικείμενο: «Πειραματική Ατομική ή/και Μοριακή Φυσική».

08/2007 - 10/2009	Ειδικός Λειτουργικός Επιστήμονας Γ' βαθμίδας, Ίδρυμα Τεχνολογίας και Έρευνας, Ινστιτούτο Ηλεκτρονικής Δομής και Laser. Γνωστικό αντικείμενο: «Εφαρμογές συστημάτων Λείζερ στενών παλμών και υψηλής ισχύος».
08/2003 - 08/2007	Μεταδιδακτορικός Επιστημονικός Συνεργάτης (Post-Doc), Ίδρυμα Τεχνολογίας και Έρευνας, Ινστιτούτο Ηλεκτρονικής Δομής και Laser.
08/2001 - 08/2003	Μεταδιδακτορικός Επιστημονικός Συνεργάτης (Post-Doc), Department of Physics, Kansas State University, USA.
09/1996 - 08/2001	Υπότροφος στα πλαίσια της εκπόνησης της διδακτορικής διατριβής (Research Assistant), Department of Physics, Kansas State University, USA.
10/1993 - 12/2000	Υπότροφος στα πλαίσια της εκπόνησης της διδακτορικής διατριβής (Teaching Assistant and Laboratory Instructor), Τμήμα Φυσικής, Πανεπιστήμιο Κρήτης.

ΕΠΙΣΤΗΜΟΝΙΚΗ ΕΜΠΕΙΡΙΑ

Πειραματικές δεξιότητες

- Φασματοσκοπία Auger ηλεκτρονίων μηδέν μοιρών
- Τεχνικές απεικόνισης θραυσμάτων κρούσεων
- Τεχνικές rump-probe
- Ηλεκτροστατικά φασματόμετρα (ημισφαιρικά, παράλληλων πλακών)
- Φασματόμετρα χρόνου πτήσης time-of-flight (mass spectrometer, magnetic bottle)
- Τεχνολογία αερίων στόχων (gas cells, pulsed jets, cold gas targets)
- Τεχνολογία υψηλού και υπερυψηλού κενού
- Ανιχνευτές θέσης (resistive, backgammon, delay line anode)
- Ηλεκτρικά και ηλεκτρονικά εξαρτήματα ανιχνευτών
- Οπτικά εξαρτήματα και τεχνολογία για συστήματα Laser femtosecond
- Μηχανολογικός σχεδιασμός πειραματικών διατάξεων και εξαρτημάτων τους

Υπολογιστικές δεξιότητες

- Λειτουργικά συστήματα: DOS, VAX, UNIX, LINUX, WINDOWS
- Εφαρμογές: LATEX, CorelDraw, Origin, Mathematica, OFFICE
- Εξειδικευμένα επιστημονικά πακέτα: SIMION3D
- Γλώσσες προγραμματισμού: FORTRAN, PASCAL, LUA
- Ανάπτυξη λογισμικού για καταγραφή και επεξεργασία δεδομένων
- Ανάπτυξη λογισμικού για μοντελοποίηση φυσικών διαδικασιών

Ξένες Γλώσσες

- Άριστη γνώση της Αγγλικής γλώσσας.

ΣΥΝΕΡΓΑΣΙΑ ΜΕ ΔΙΕΘΝΗ ΕΡΕΥΝΗΤΙΚΑ ΙΔΡΥΜΑΤΑ ΚΑΙ ΠΑΝΕΠΙΣΤΗΜΙΑ

- National Center for Scientific Research - Demokritos, Greece
- Centre for Plasma Physics and Lasers, Greece
- Dublin City University, School of Physical Sciences, Ireland
- Universidade Nova de Lisboa, Faculdade de Ciências e Tecnologia, Portugal

ΑΞΙΟΛΟΓΗΤΗΣ ΣΕ ΕΠΙΣΤΗΜΟΝΙΚΑ ΠΕΡΙΟΔΙΚΑ

- Physical Review Letters (από το 2004)
- Journal of Physics B: Atomic Molecular and Optical Physics (από το 2009)

- Journal of Electron Spectroscopy and Related Phenomena (από το 2010)
- Nuclear Instruments and Methods in Physics Research A (από το 2010)
- New Journal of Physics (από το 2011)
- Rapid Communications in Mass Spectrometry (από το 2011)

ΚΥΡΙΟΣ ΕΡΕΥΝΗΤΗΣ ΣΕ ΕΡΕΥΝΗΤΙΚΑ ΠΡΟΓΡΑΜΜΑΤΑ

- Marie Curie International Reintegration Grants (IRG), FP6-2002-Mobility-12, 2003.
Τίτλος: Characterization and Research Applications of Attosecond Pulses.
Προϋπολογισμός: 80,000 €.

ΣΥΜΜΕΤΟΧΗ ΣΕ ΕΡΕΥΝΗΤΙΚΑ ΠΡΟΓΡΑΜΜΑΤΑ

- Πρόγραμμα ΠΕΝΕΔ, Πανεπιστήμιο Κρήτης, Υπουργείο Βιομηχανίας Ενέργειας και Τεχνολογίας, 1991.
Τίτλος: *Electron excitation mechanisms in ion-atom collisions*.
Προϋπολογισμός: 8.400.000 GDR. Σύμβαση έργου: 01/11/1994 - 21/12/1995
- Πρόγραμμα ΠΕΝΕΔ, Πανεπιστήμιο Κρήτης, Υπουργείο Βιομηχανίας Ενέργειας και Τεχνολογίας, 1996.
Τίτλος: *Differential cross section measurements of Resonance Transfer Ex-citation (RTE) in collisions of light ions with H₂ and He targets using position sensitive detection (PSD) with zero-degree Auger electron spectroscopy*.
Προϋπολογισμός: 10.000.000 GDR. Σύμβαση έργου: 01/09/1996 - 30/08/1998
- Human Capital & Mobility, Networks (EEC), 1992.
Τίτλος: *Interaction of slow highly charged ions with solid surfaces*
Προϋπολογισμός: 49.000 ECU.
- Διακρατική συνεργασία Ελλάδας-Ουγγαρίας, Ινστιτούτο Ηλεκτρονικής Δομής και Laser, 1999.
Τίτλος: *Study of two-electron mechanisms in collisions of highly-charged ions with atoms*.
Προϋπολογισμός: 4.200.000 GDR. Σύμβαση έργου: 01/10/2000 – 31/12/2000
- Marie Curie Transfer of Knowledge Grant Contr. Nr. MTKD-CT-2004-517145, 2003
Τίτλος: *XUV-High Order Harmonic Metrology Tools for Novel Spectroscopic Applications (X-HOMES)*.
Προϋπολογισμός: 400.000 €.
- Marie Curie “Joint Research Activities” Grant, 2004
Τίτλος: *Frontiers of Optical Science: Controlling Intense Light (FOSCIL)*.
Προϋπολογισμός: 170.000 €.
- Διακρατική επιστημονική και τεχνολογική συνεργασία Ελλάδας-Ουγγαρίας, 2004.
Τίτλος: *Electron scattering processes in ion-atom collisions*.
Προϋπολογισμός: 11.740 €.
- ELI, “Preparatory phase for ELI”, 2010.
Προϋπολογισμός: 120.000 €.
- HIPPER, “Preparatory phase for HIPER”, 2010.
Προϋπολογισμός: 120.000 €.
- Πανεπιστήμιο Ιωαννίνων, 2011
Τίτλος: *Προμήθεια οπτικών εξαρτημάτων για την ολοκλήρωση της πειραματικής διάταξης pump-probe με fs παλμούς laser*.
Προϋπολογισμός: 5.000 €.
- ΘΑΛΗΣ, Υπουργείο παιδείας, δια βίου μάθησης και θρησκευμάτων, 2012
Τίτλος: *APAPES Ατομική Φυσική με Επιταχυντές: Φασματοσκοπία Ηλεκτρονίων Ιόντων Δέσμης στον Επιταχυντή TANDEM του ΕΚΕΦΕ Δημόκριτος (ΑΦΕΦΗΛΙ)*.
Προϋπολογισμός: 600.000 €. Υπεύθυνος ερευνητικής ομάδας του Πανεπιστημίου Ιωαννίνων.

- ΘΑΛΗΣ, Υπουργείο παιδείας, δια βίου μάθησης και θρησκευμάτων, 2012
Τίτλος: *Αλληλεπίδραση βραχύβιων και ισχυρών ηλεκτρομαγνητικών παλμών με την ύλη*
Προϋπολογισμός: 600.000 €.

ΟΡΓΑΝΩΣΗ ΣΥΝΕΔΡΙΩΝ

Μέλος της τοπικής επιτροπής οργάνωσης

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

ΔΙΔΑΚΤΙΚΗ ΕΜΠΕΙΡΙΑ

10/2015 – Σήμερα: ΤΕΙ Κρήτης, Μεταπτυχιακό Πρόγραμμα PLAPA

- Ατομικές Διαδικασίες σε Πλάσμα

10/2014 – Σήμερα: Ελληνικό Ανοικτό Πανεπιστήμιο

- Κβαντική Φυσική

10/2010 – Σήμερα: Τμήμα Φυσικής, Πανεπιστήμιο Ιωαννίνων

- Σύγχρονη Φυσική I (3ο εξάμηνο)
- Σύγχρονη Φυσική II (4ο εξάμηνο) - Σημειώσεις (Ανοικτά Ακαδημαϊκά Μαθήματα)
- Φυσική των Laser (7ο εξάμηνο) - Σημειώσεις (Ανοικτά Ακαδημαϊκά Μαθήματα)
- Ατομική Φυσική (7ο εξάμηνο) - Σημειώσεις (Ανοικτά Ακαδημαϊκά Μαθήματα)
- Εργαστήρια Νεότερης Φυσικής I (7ο εξάμηνο)
- Εργαστήρια Κυμάνσεων και Οπτικής (4^ο εξάμηνο)
- Εργαστήρια Ηλεκτρισμού και Μαγνητισμού (3^ο εξάμηνο)
- Εργαστήρια Πειραματικής Φυσικής (1^ο εξάμηνο)

Διπλωματικές Εργασίες - Masters

- ‘Πηγή σύμφωνης UV/VUV ακτινοβολίας ελεγχόμενου μήκους κύματος βασισμένη στην παραγωγή χαμηλής τάξης αρμονικών σε κελί αργού με τη χρήση οπτικού παραμετρικού ενισχυτή λέιζερ’, Λάζαρος Βαρβαρέζος (2015).

Διπλωματικές Εργασίες - Πτυχίο

- ‘Μελέτη ιδιοτήτων απεικονιστικού φασματόμετρου VMI’, Ελισάβετ Μπιζάκη (2011).
- ‘Χρονικός χαρακτηρισμός στενών παλμών laser με τη μέθοδο της αυτοσυσχέτισης 2^{ns} τάξης’, Ευαγγελία Δελλή (2012).
- ‘Κατασκευή και μελέτη φασματόμετρου μαγνητικής φιάλης’, Σωκράτης Αναστασόπουλος (2012).
- ‘Θεωρητική μελέτη και προσομοίωση του φασματόμετρου μαγνητικής φιάλης’, Αλκμήνη-Βασιλική Δαγκλή (2012).
- ‘Μοντελοποίηση παραγωγής αρμονικών από την αλληλεπίδραση ακτινοβολίας λέιζερ με άτομα’, Ιωάννης Μάκος (2013).
- ‘Διάσπαση του μοριακού ιόντος υδρογόνου σε ισχυρά πεδία Laser: Η εικόνα Floquet’, Σπύρος Διβάνης (2013).
- ‘Ο ρόλος των φαινομένων όγκου στην διάσπαση του H₂⁺ κατά την αλληλεπίδρασή του με ισχυρά πεδία laser’, Στυλιανός Πασσαλίδης (2014).
- ‘Μελέτη των συνθηκών βελτιστοποίησης της παραγωγής της 3ης και 5ης αρμονικής κατά την αλληλεπίδραση ισχυρών παλμών laser με αέριο αργό σε στατικό κελί’, Λάζαρος Βαρβαρέζος (2014).
- ‘Μελέτη της εφαρμοσιμότητας της τεχνικής Intensity Selective Scanning (ISS) στην μοριακή διάσπαση του H₂⁺ κατά την αλληλεπίδρασή του με ισχυρά πεδία laser’, Αναστάσιος Γρηγοριάδης (2015).
- ‘Μελέτη παραγωγής χαμηλής τάξης αρμονικών κατά την αλληλεπίδραση ισχυρών παλμών laser με αέριο Ar σε παλμικό jet’, Εμμανουήλ Κεχάογλου (2015).

ΣΥΜΜΕΤΟΧΗ ΣΕ ΕΚΠΑΙΔΕΥΤΙΚΑ ΠΡΟΓΡΑΜΜΑΤΑ / ΘΕΡΙΝΑ ΣΧΟΛΕΙΑ

- LLP/Erasmus IP 2010-2011.
Τίτλος: CPOTS – Introduction to Charged Particle Optics: Theory and Simulation.
20 ώρες διδασκαλίας: Απεικονιστικά Φασματόμετρα, Φασματόμετρο μαγνητικής φιάλης, Εργαστήρια εφαρμογών του πακέτου προσομοίωσης SIMION.
- LLP/Erasmus IP 2011-2012.
Τίτλος: CPOTS – Introduction to Charged Particle Optics: Theory and Simulation.
20 ώρες διδασκαλίας: Απεικονιστικά Φασματόμετρα, Εργαστήρια εφαρμογών του πακέτου προσομοίωσης SIMION
- LLP/Erasmus IP 2012-2013.
Τίτλος: CPOTS – Introduction to Charged Particle Optics: Theory and Simulation.
20 ώρες διδασκαλίας: Απεικονιστικά Φασματόμετρα, Εργαστήρια εφαρμογών του πακέτου προσομοίωσης SIMION
- LLP/Erasmus IP 2012-2013.
Τίτλος: HIPOLIN – An introduction to high power light-matter interactions.
2 ώρες διδασκαλίας: Ατομική και μοριακή δυναμική με χρήση ισχυρών παλμών λέιζερ.

ΚΡΙΤΙΚΟΣ ΑΝΑΓΝΩΣΤΗΣ

- ‘Κυματική Φυσική’, Ελληνικά Ακαδημαϊκά Συγγράμματα και Βοηθήματα (Κάλλιπος, κωδ. 9794) (2015).

ΑΡΘΡΑ ΣΕ ΔΙΕΘΝΗ ΕΠΙΣΤΗΜΟΝΙΚΑ ΠΕΡΙΟΔΙΚΑ ΚΑΙ ΒΙΒΛΙΑ (ΜΕ ΚΡΙΤΕΣ)

1. “Search for inelastic electrons scattered off ions in energetic ion-atom collisions”,
T.J.M. Zouros, C. Liao, S. Hagmann, E.C. Montenegro, G. Toth, P. Richard and E.P. Benis,
Nucl. Instrum. Methods Phys. Res. B **98**, 371 (1995).
2. “A new hemispherical analyser with 2-D PSD and focusing lens for use in 0° electron
spectroscopy”,
E.P. Benis, K. Zaharakis, M. M. Voultzidou and T.J.M. Zouros,
Nucl. Instrum. Methods Phys. Res. B **146**, 120 (1998).
3. “High resolution RTE measurements at zero degrees using a hemispherical analyser with lens and
2-D PSD”,
E.P. Benis, T.J.M. Zouros and P. Richard,
Nucl. Instrum. Methods Phys. Res. B **154**, 276 (1999).
4. “Hemispherical analyser with 2-D PSD for zero-degree Auger projectile spectroscopy”,
E.P. Benis, T.J.M. Zouros, H. Aliabadi and P. Richard,
Phys. Scr. **T80B**, 529 (1999).
5. “Improving the energy resolution of a hemispherical spectrograph using a paracentric entry at a
non-zero potential”,
E.P. Benis and T.J.M. Zouros,
Nucl. Instrum. Methods Phys. Res. A **440**, 462 (2000).
6. “Energy dependence of the metastable fraction in $B^{3+}(1s^2\ ^1S, 1s2s\ ^3S)$ beams produced in
collisions with solid and gas targets”,
M. Zamkov, H. Aliabadi, E.P. Benis, P. Richard, H. Tawara, T.J.M. Zouros,
Phys. Rev. A **64**, 052702 (2001).
7. “Absolute cross sections and decay rates for the triply excited $B^{2+}(2s2p^2\ ^2D)$ resonance in
electron-metastable-ion collisions”,
M. Zamkov, H. Aliabadi, E.P. Benis, P. Richard, H. Tawara and T.J.M. Zouros,
Phys. Rev. A **65**, 032705 (2002).
8. “Technique for the determination of the $1s2s\ ^3S$ metastable fraction in two-electron ion beams”,
E.P. Benis, T.J.M. Zouros, M. Zamkov, and P. Richard,
Phys. Rev. A **65**, 064701 (2002).
9. “Fraction of metastable $1s2s\ ^3S$ ions in fast He-like beams ($Z=5-9$) produced in collisions with
carbon foils”,
M. Zamkov, E.P. Benis, P. Richard, and T.J.M. Zouros,
Phys. Rev. A **65**, 062706 (2002).
10. “The hemispherical deflector analyzer revisited: I. Motion in the ideal $1/r$ potential, generalized
entry conditions, Kepler orbits and spectrometer basic equation”,
T. J. M. Zouros and E.P. Benis,
J. Electr. Spectr. Rel. Phenom. **125**, 221 (2002); Erratum: **142**, 175 (2005).
11. “Triple electron capture in fast 0.5-1.1 MeV/u C^{6+} on Ar collisions”,
M. Zamkov, E.P. Benis, P. Richard, T.G. Lee, and T.J.M. Zouros,
Phys. Rev. A **66**, 042714 (2002).
12. “Absolute measurements and calculation of triple electron capture in fast 0.5-1.1 MeV/u C^{6+} on
Ar collisions”,
M. Zamkov, E.P. Benis, T.G. Lee, P. Richard, and T.J.M. Zouros,
Nucl. Instrum. Methods Phys. Res. B **205**, 522 (2003).

13. "Comparison of two experimental techniques for the determination of the $1s2s\ ^3S$ metastable beam fraction in energetic B^{3+} ions",
E.P. Benis, M. Zamkov, P. Richard, and T.J.M. Zouros,
Nucl. Instrum. Methods Phys. Res. B **205**, 517 (2003).
14. "Differential electron scattering from positive ions measured by zero-degree ion-atom spectroscopy",
T.J.M. Zouros, E.P. Benis, T.W. Gorczyca, A.D. Gonzalez, M. Zamkov, and P. Richard,
Nucl. Instrum. Methods Phys. Res. B **205**, 508 (2003).
15. "Experimental observation and theoretical calculations of triply excited $2s2p^2\ ^2S^e$, $2\ ^4P^e$, $2D^e$, and $2p^3\ ^2P^o$, $2D^o$ states of fluorine",
M. Zamkov, E.P. Benis, C.D. Lin, T.G. Lee, T. Morishita, P. Richard and T.J.M. Zouros,
Phys. Rev. A **67**, R050703 (2003).
16. "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",
T.J.M. Zouros, E.P. Benis, and T.W. Gorczyca,
Phys. Rev. A **68**, R010701 (2003).
17. "Rescattering double ionization of D_2 and H_2 by intense laser pulses",
A.S. Alnaser, T. Osipov, E.P. Benis, A. Wech, C. L. Cocke, X. M. Tong, and C. D. Lin,
Phys. Rev. Lett. **91**, 163002, (2003); Publisher's Note: *Phys. Rev. Lett.* **91**, 219902, (2003).
18. "Isoelectronic study of triply excited state Li-like states",
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ΠΡΟΣΚΕΚΛΗΜΕΝΕΣ ΟΜΙΛΙΕΣ ΣΕ ΔΙΕΘΝΗ ΕΠΙΣΤΗΜΟΝΙΚΑ ΣΥΝΕΔΡΙΑ

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P. Tzallas, E.P. Benis, and D. Charalambidis,
Workshop on Ultra-high Intensity Interaction Plasma Emission Diagnostic, CCLRC Rutherford Appleton Laboratory, 4-5 April 2005.
 31. "On the generation metrology and applications of of XUV attosecond pulses",
P. Tzallas, E.P. Benis, M. Kovacev, E. Papalazarou, L.A.A Nikolopoulos, G.D. Tsakiris, and D. Charalambidis,
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 32. "Zero-degree projectile electron spectroscopy of B²⁺ in 3-8 MeV collisions with H₂",
T.J.M. Zouros, E.P. Benis, and P. Richard,
XXIV International Conference on Photonic Electronic and Atomic Collisions, Rosario, Argentina, 20-26 July 2005.
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T.J.M. Zouros and E.P. Benis,
XXIV International Conference on Photonic Electronic and Atomic Collisions, Rosario, Argentina, 20-26 July 2005.
 34. "XUV attosecond pulses: generation, metrology, and potential applications",
E.P. Benis, L.A.A. Nikolopoulos, P. Tzallas, G.D. Tsakiris, and D. Charalambidis,
XXIV International Conference on Photonic Electronic and Atomic Collisions, Rosario, Argentina, 20-26 July 2005.
 35. "On the second order autocorrelation of an XUV attosecond pulse train",
L.A.A. Nikolopoulos, E.P. Benis, P. Tzallas, D. Charalambidis, K. Witte, and G.D. Tsakiris,
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 36. "Numerical ab-initio study of non-linear response of helium under an XUV radiation",
L.A.A. Nikolopoulos, E.P. Benis, P. Tzallas, D. Charalambidis, and G.D. Tsakiris,
International Conference on Computational Methods in Sciences and Engineering, Loutraki, Korinthos, Greece, 21-26 October 2005.
 37. "Single photon-induced symmetry breaking of H₂ dissociative ionization",
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, 9th European Conference on Atoms Molecules and Photons, Heraklion, Crete, Greece, 6-11 May 2007.
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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,
9th European Conference on Atoms Molecules and Photons, Heraklion, Crete, Greece, 6-11 May 2007.
 39. "Towards intense isolated pulses",
P. Tzallas, E. Skantzakis, C. Kalpouzos, E.P. Benis, A. Bonarou, G.D. Tsakiris, and D. Charalambidis,
9th European Conference on Atoms Molecules and Photons, Heraklion, Crete, Greece, 6-11 May 2007.

40. “Full temporal reconstruction of lower order harmonic superposition”,
E. Skantzakis, P. Tzallas, E. Papalazarou, C. Kalpouzos, A. Bonarou, E.P. Benis, G.D. Tsakiris,
and D. Charalambidis,
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41. “Two photon direct double ionization: a non-linear medium for xuv metrology”,
E.P. Benis, P. Tzallas, G.D. Tsakiris, and D. Charalambidis,
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2007.
42. “Spatiotemporal effects in attosecond pulse train metrology”,
E.P. Benis, J. Kruse, P. Tzallas, E. Skantzakis, G.D. Tsakiris, and D. Charalambidis,
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2007.
43. “Non-linear XUV processes @ femto / atto-second temporal scales”,
P. Tzallas, E.P. Benis, L.A.A. Nikolopoulos, O. Faucher, E. Skantzakis, G.D. Tsakiris, and D.
Charalambidis,
XXV International Conference on Photonic Electronic and Atomic Collisions, Freiburg,
Germany, 25-31 July 2007.
44. “Two photon double ionization of rare gases by a superposition of high order harmonics”,
E.P. Benis, P. Tzallas, T.N. Kitsopoulos, G.D. Tsakiris, and D. Charalambidis,
20th International Symposium on Ion-Atom Collisions, Agios Nikolaos, Crete, Greece, 1-4 August
2007.
45. “H₂⁺ photodissociation under 7 fs chirped laser pulses”,
E.P. Benis, M. Bakarezos, N.A. Papadogiannis, M. Tatarakis, L.A.A. Nikolopoulos,
Science @ FELs (Satellite Meeting to the 11th International Conference on Synchrotron
Radiation Instrumentation in Lyon), DESY in Hamburg, Germany, 15-18 July 2012.
46. “Ionization/dissociation of toluene under strong asymmetric two- color laser fields of fs duration”,
S. Kaziannis, N. Kotsina, E.P. Benis, S. Danakas and C. Kosmidis,
11th European Conference on Atoms, Molecules and Photons, Aarhus, Denmark, 24-28 June
2013.
47. “Molecular Dynamics Utilizing Pump-Probe Technique at the VUV Region”,
C. Papadopoulou, S. Kaziannis, S. Danakas, E.P. Benis and C. Kosmidis,
COST Action MP1203 meeting at Dublin, Ireland, 21-23 October 2013.
48. “Atomic Physics with Accelerators: Projectile Electron Spectroscopy (APAPES)”
I. Madesis, A. Dimitriou, A. Lagoyannis, M. Axiotis, T. Mertzimekis, M. Andrianis, E.P. Benis,
S. Harissopulos, B. Sulik, I. Valastyán, T.J.M. Zouros,
23rd Conference on Application of Accelerators in Research & Industry, San Antonio, TX, 25 -
30 May 2014.
49. “Treatment of the metastable Auger decay in fast ion-atom collisions in an effective Monte Carlo
type simulation”,
S. Doukas, N. Angelinos, A. Kanellakopoulos, E.P. Benis, I. Madesis, A. Dimitriou and T.J.M.
Zouros,
6th International Conference from Scientific Computing to Computational Engineering, Athens,
Greece, 9 - 12 July 2014.
50. “Atomic Physics with Accelerators: Projectile Electron Spectroscopy (APAPES)”
I. Madesis, A. Dimitriou, A. Lagoyannis, M. Axiotis, T. Mertzimekis, M. Andrianis, E.P. Benis,
S. Harissopulos, B. Sulik, I. Valastyán, T.J.M. Zouros,
International Conferences on the Physics of Highly Charged Ions, San Carlos de Bariloche,
Argentina, Aug. 31 - Sept 5 2014.
51. “The Auger-KLL spectrum of Carbon in 12 MeV C⁴⁺ + Ne collisions: Comparison of
Experimental Measurements and SIMION simulations”,
E.P. Benis, I. Madesis, A. Dimitriou, S. Doukas, A. Laoutaris, B. Sulik, I. Valastyán, T.J.M.

- Zouros,
11th Topical Workshop of the Stored Particles Atomic Physics Research Collaboration, Worms, Germany, Oct. 16-17, 2014.
52. “High resolution Auger projectile electron spectroscopy of Li-like ions produced by electron capture of He-like ions in collisions with gaseous targets”
I. Madesis, A. Dimitriou, A. Laoutaris, A. Lagoyannis, M. Axiotis, T. J. Mertzimekis, M. Andrianis, E. P. Benis, S. Harissopoulos, B. Sulik, I. Valastyan, T. J. M. Zouros,
CDAMOP 2015, New Delhi, India, Mar 11-14, 2015.
 53. “Formation mechanisms of the $1s2s2p\ ^4P_J$ metastable state in 12 MeV C^{4+} ($1s^2\ ^1S, 1s2s\ ^3S$) collisions with H_2, He, Ne and Ar ”,
E.P. Benis, I. Madesis, A. Dimitriou, A. Laoutaris, B. Sulik, O. Sise and T.J.M. Zouros,
Photon and fast Ion induced Processes in Atoms, Molecules and Nanostructures, Debrecen, Hungary, Mar 24-26, 2015.
 54. “The role of the effective solid angle in the determination of the electron yield of metastable projectile Auger states”,
E.P. Benis, S. Doukas, I. Madesis, A. Dimitriou, A. Laoutaris, T.J.M. Zouros, F. Parente, C. Martins, J. P. Marques, P. Indelicato and J. P. Santos,
9th International Symposium on Swift Heavy Ions in Matter, Darmstadt, Germany, May 18-21, 2015.
 55. “Energy levels, transition rates and lifetimes for Li-like ions with $Z \leq 10$ in the $1s2s(^3S)3l$ states”,
J. P. Santos, J. P. Marques, M. C. Martins, P. Indelicato, E. P. Benis, T. J. M. Zouros, F. Parente
XXIX International Conference on Photonic, Electronic and Atomic Collisions, Toledo, Spain, July 24-30, 2015.
 56. “Investigation of the dependence of the energy resolution of a hemispherical deflection analyzer on the distance of the position sensitive detector from the focal plane”,
C. Nounis, A. Laoutaris, I. Madesis, A. Dimitriou, O. Sise, E.P. Benis, T.J.M. Zouros,
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 57. “Use of Gas and Foil strippers for the production of He-like ionic beams in both pure ground state ($1s^2$) and mixed states ($1s^2, 1s2s$) for zero-degree Auger Projectile Electron Spectroscopy”,
A. Laoutaris, I. Madesis, A. Dimitriou, A. Lagoyannis, M. Axiotis, E.P. Benis, T.J.M. Zouros,
XXIX International Conference on Photonic, Electronic and Atomic Collisions, Toledo, Spain, July 24-30, 2015.
 58. “Separation and solid angle correction of the metastable $1s2s2p\ 4P$ Auger yield produced in ion-atom collisions using the biased gas cell technique: A tool for the determination of the population mechanisms”,
I. Madesis, A. Laoutaris, S. Doukas, A. Dimitriou, E.P. Benis, T.J.M. Zouros,
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