Hadas Soifer (Yeger)

hadas.soifer@weizmann.ac.il
2 December, 1981

Higher Education:

Ph.D., *direct track*, Physics, Department of physics of complex systems, Weizmann Institute of Science, Rehovot, Israel, 2009 –
Supervisor: Dr. Nirit Dudovich
Title: *"Probing electronic wavefunctions via high harmonic generation"*

M.Sc., Physics, Department of physics of complex systems, Weizmann Institute of Science, Rehovot, Israel, 2007-2009
Supervisor: Dr. Nirit Dudovich
Thesis: "*Time resolved measurements in the attosecond regime*"

BA, Physics, Technion, Haifa, Israel, 2003-2006

Employment:

2010 -	Weizmann Institute of Science, Ph.D. student
2007 – 2009	Weizmann Institute of Science, M.Sc student
2006 – 2007	CISCO, programmer
2005 – 2006	Technion, Physics department, research assistant in the lab of Prof. Uri Sivan
2003 – 2006	Technion, physics BA student
2000 – 2003	Military service in the "Haman-Talpiot" track

Publications:

D. Shafir, **H. Soifer**, C. Vozzi, A. S. Johnson, A. Hartung, Z. Dube, D. M. Villeneuve, P. B. Corkum, N. Dudovich, and A. Staudte,
"Trajectory-Resolved Coulomb Focusing in Tunnel Ionization of Atoms with Intense, Elliptically Polarized Laser Pulses", Phys. Rev. Lett. **In press** (2013)

H. Soifer, M. Dagan, D. Shafir, B. D. Bruner, M. Y. Ivanov, V. Serbinenko, I. Barth, O. Smirnova, and N. Dudovich,
"Spatio-spectral analysis of ionization times in high-harmonic generation", Chem. Phys. **414**, 176 (2013).

D. Shafir*, **H. Soifer***, B. D. Bruner, M. Dagan, Y. Mairesse, S. Patchkovskii, M. Y. Ivanov, O. Smirnova, and N. Dudovich,
"Resolving the time when an electron exits a tunnelling barrier", Nature **485**, 343 (2012).
*** Equal contribution**

D. Shafir, B. Fabre, J. Higuet, **H. Soifer**, M. Dagan, D. Descamps, E. Mével, S. Petit, H. Wörner, B. Pons, N. Dudovich, and Y. Mairesse,
"Role of the Ionic Potential in High Harmonic Generation", Phys. Rev. Lett. **108**, 203001 (2012).

H. Soifer, P. Botheron, D. Shafir, A. Diner, O. Raz, B. D. Bruner, Y. Mairesse, B. Pons, and N. Dudovich
"Near-Threshold High-Order Harmonic Spectroscopy with Aligned Molecules", Phys. Rev. Lett. **105**, 143904 (2010)

A. Artzy Schnirman, E. Zahavi, **H. Yeger**, R. Rosenfeld, I. Benhar, Y. Reiter and U. Sivan
"Antibody Molecules Discriminate between Crystalline Facets of a Gallium Arsenide Semiconductor", Nano Lett. **6**, 1870-1874 (2006)

Conference Proceedings:

D. Shafir*, **H. Soifer***, B. D. Bruner, M. Dagan, Y. Mairesse, S. Patchkovskii, M. Y. Ivanov, O. Smirnova, and N. Dudovich,
"When does an electron exit a tunneling barrier?" In Ultrafast Phenomena XVIII, *EPJ Web of Conferences* (Vol. 41, p. 02019, 2013). EDP Sciences.

H. Soifer, P. Botheron, D. Shafir, A. Diner, O. Raz, B. D. Bruner, Y. Mairesse, B. Pons, and N. Dudovich
"Below-Threshold High-Order Harmonics Probed with Aligned Molecules", in *International Conference on Ultrafast Phenomena*, OSA Technical Digest (CD) (Optical Society of America, 2010), paper ME35

Oral presentations:

"When does an electron exit a tunneling barrier?", XVIII intergantional conference on ultrafast phenomena, Lausanne, 2012.

"When does an electron exit the tunneling barrier?", IPS conference, Tel-Aviv, 2010

Poster presentations:

"When does an electron exit the tunneling barrier?", Multiphoton Processes – Gordon conference 2012, NH

"Near-Threshold High-Order Harmonic Spectroscopy with Aligned Molecules", ATTO03, Hokaido, Japan

"Near-Threshold High-Order Harmonic Spectroscopy with Aligned Molecules", Multiphoton Processes - Gordon conference 2010, NH

Awards and Honors:

Adams Scholarship, 2011

BA, Graduation *Summa Cum Laude,* 2007

Student in the Technion's Chais Excellence Program, 2003-2006

'Dean's list' during BA 2006

'President's list' during BA 2005

'President's list' during BA 2004

Teaching:

2005 – 2006 Technion, Tutor to students on behalf of "Kidum-Studentim"

Volunteer activity:

2007 – 2008 Teaching underprivileged girls in a 'moadonit' in Rehovot