

# Prof. Nirit Dudovich

## Personal Details

Date of birth: [REDACTED]

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## Education:

2004 - 2007 Post-doctoral research at the National Research Council of Canada.

1999 – 2004 Ph.D. in Physics, Weizmann Institute of Science, Rehovot, Israel.

Thesis subject: "Quantum Coherent Control with Shaped Femtosecond Pulses" (Under the supervision of Prof. Yaron Silberberg).

1996 – 1999 M.Sc. in Physics, Weizmann Institute of Science, Rehovot, Israel.

Thesis subject: "Active Semiconductor-based Grating-Waveguide Structures" (Under the supervision of Prof. Asher A. Friesem).

1993 – 1996 B.Sc. in Physics and Computer Science, Tel-Aviv University, Israel.

Summa Cum Laude

## Employment History:

2020 Full professor at the Weizmann Institute of Science, Israel.

2014 - 2020 Associate Professor at the Weizmann Institute of Science, Israel.

2007 - 2014 Senior Scientist at the Weizmann Institute of Science, Israel.

1995 – 1996 Research aid, Weizmann Institute of Science (under the supervision of Prof. S. Shtrikman).

## Other Appointments

### Organization of scientific meetings

2024 Co-chair at the Gordon Multiphoton Processes conference

2022 Vice chair at the Gordon Multiphoton Processes conference

2022 Co-chair at the Ultrafast Phenomena conference

2017 - 2020 Committee member, Ultrafast Phenomena.

2018 - 2018 Committee member, Conference on Lasers and Electro-Optics Europe (CLEO/Europe).

2017 Organizer, High Intensity Coherent Nonlinear Optics (HICONO) workshop, Israel.

2014-2017 Committee member, Conference on Lasers and Electro Optics (CLEO).

2010-2012 Committee member, International Meeting on Optical Engineering and Science in Israel (OASIS).

2012 Committee member, Conference on High Intensity Laser and Attosecond Science in Israel (CHILI).

## **Institutional Responsibilities**

- 2019 Chair of the Physics Board of Studies
- 2016-2018 Member, Academic Hiring Committee, Weizmann Institute of Science.
- 2015-2018 Coordinator, Ulpana De Shalit in Physics, Weizmann Institute of Science.
- 2015-2017 Member, Steering Committee, Weizmann Institute of Science.
- 2016-2018 Member, Equipment Committee, Weizmann Institute of Science.

## **Outreach activity**

- **Initiator and organizer of a new program aimed at promoting high-school female students in STEM.** This project by links female scientists and students in the STEM fields with various schools in Israel. Women who have achieved exceptional scientific achievements provide a significant and important role model for young students at the critical stage in which they choose a professional track.
- **Co-initiator of the “Combining Motherhood and Science” workshop, Weizmann Institute of Science.** One of the main challenges in of woman during their academic path is the combination of scientific career with motherhood. On 2015, together with two female professors, we have launched a unique course at the Weizmann Institute focused on the main challenges in this combination, while providing support, encouraging young female students during their academic career.

**Teaching experience:** 2008-2021 Course on “Nonlinear Optics and Ultrafast Phenomena”

## **International recognition**

### **Awards:**

1. The Tel-Aviv University, Exact Sciences faculty Dean’s Award (1994).
2. The Tel-Aviv University, Physics Department Award for Outstanding Students (1995).
3. The Tel-Aviv University, Exact Sciences faculty Dean’s Award (1995).
4. Weizmann Institute of Science, Gad Resheff Memorial Prize, for Outstanding Achievements in Research (2003).
5. The Parliament of Israel, Honor Award for Outstanding Students (2003).
6. Chorafas Foundation Award for Outstanding Achievement (2003).
7. Rothschild Fellowship (2004).
8. Weizmann Postdoc Fellowship for Women (2004).
9. NSREC Visiting Fellowship (2005).
10. Allon fellowship (2008).
11. IUPAP Young Scientist Prize (2012).
12. IPS Prize for Young Physicist (2012).
13. Krill prize for excellence in scientific research (2013).
14. ERC Starting investigator grant, European Research Council (2013).
15. Elected to the Young Israel Academy of Sciences and Humanities (2015).
16. Elected to be a Fellow of the American Physical Society (APS) (2016).
17. Michael Bruno award, given to Israeli scientists whose achievements to date suggest future breakthroughs in their respective fields (2017).
18. Kimmel award for innovative investigation (2017).
19. ERC consolidator grant, European Research Council (2019).
20. Weizmann Prize, Tel Aviv-Yafo Municipality (2021).

## Talks at international meetings

### Invited talks (partial list since 2014)

1. Plenary lecture in the course of the annual spring meeting of the German Physical Society (DPG), Berlin, Germany (2014).
2. Plenary lecture in the 46<sup>th</sup> EGAS conference, Lille, France (2014).
3. FEL-Atto conference, London, UK (2014).
4. The 24<sup>th</sup> ICAP conference, Washington DC, USA, (2014).
5. Fast fellow at the ETH, Zurich, Switzerland (2014).
6. Atomic Physics Workshop, Dresden, Germany (2014).
7. Opening talk, tutorial at the 5<sup>th</sup> International Conference on Attosecond Science, Canada (2015).
8. Israel-Canada workshop, Ottawa, Canada (2016).
9. Multiphoton Processes Gordon Conference, U.S.A (2016).
10. Faraday discussions, Edinburgh, UK (2016).
11. Atomic Physics workshop, Dresden, Germany (2016).
12. Israel Physics Society (IPS) conference, Tel Aviv, Israel (2016).
13. Bridging the Worlds of Electromagnetic and Quantum Simulations, Centre Européen de Calcul Atomique et Moléculaire (CECAM), Tel Aviv, Israel (2016).
14. Ultrafast through Ultraslow Dynamics in Molecules and Clusters meeting, Weizmann Institute of Science, Rehovot, Israel (2017).
15. Conference on Lasers and Electro-Optics (CLEO), San Jose, U.S.A (2017).
16. FRIAS conference "Beyond molecular movies", Freiburg, Germany (2017).
17. "When Light Meets Matter", Weizmann Institute of Science, Rehovot, Israel (2018)
18. Spring meeting of the German Physical Society (DPG), Erlangen, Germany (2018).
19. High-Intensity Lasers and High-Field Phenomena (HILAS), Strasbourg, France (2018).
20. Recollision Symposium, Montebello, Canada (2018).
21. Discussion leader, Multiphoton Gordon conference, Bryant University, USA (2018).
22. Keynote speaker at the UFDIM conference, Crete, Greece (2018).
23. Novel Concepts in Photonics research, Israel (2019).
24. French-Israel Symposium on non-linear & quantum optics, FRISNO15, France (2019).
25. Workshop on "Time and fundamentals of quantum mechanics", Weizmann Institute of Science, Rehovot, Israel (2019).
26. Plenary lecture at the European Conference on Atomic, Molecular and Optical Physics (ECAMP-13), Florence, Italy (2019).
27. XXXI<sup>st</sup> International Conference on Photonic, Electronic, and Atomic Collisions (ICPEAC), Deauville, France (2019).
28. Quantum Dynamics in Tailored Laser Fields workshop, Berlin (2020).
29. Plenary speaker in Conference on Lasers and Electro-Optics (CLEO/Europe), (2021).
30. The International Conference on Attosecond Science, Orlando, USA (2022)
31. 23<sup>th</sup> European Conference on Dynamics of Molecular Systems, Hamburg (2022).
32. Photoionization and resonant inelastic X-ray scattering (IWP&RIXS), Japan (2022).
33. Plenary lecture at the OASIS conference, Israel (2022).
34. Workshop on Non-Equilibrium Dynamics of Condensed Matter, Israel (2023).

**Patents:**

1. Y. Silberberg, N. Dudovich, D. Oron, Single-pulse anti-Stokes Raman microscopy and spectroscopy, International patent application WO 2004/068126, US patent 7,256,885.
2. Y. Silberberg, N. Dudovich, D. Oron, Coherently controlled nonlinear Raman spectroscopy, International patent application WO 2005/116596, US patent 7,403,282.
3. D. Oron, O. Schwartz, O. Raz, O. Katz, N. Dudovich, Linear optical characterization of ultrashort optical pulses WO2012011095A1
4. N. Dudovich, O. Raz, B. Nadler, D. Oron, System and Method for Phase Retrieval in Lensless Imaging, patent number 9970891.