

August 10, 2026

Aviv Karnieli

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Research Scientist with a passion for Quantum Physics, Optics and Photonics

Assistant Professor at the faculty of Electrical and Computer Engineering holding a PhD in Physics, focusing on quantum science and technology in optics, nanophotonics, and other platforms. Well adept in leading complex research projects, mentoring students, and holding a proven track record of academic achievements. Highly motivated, striving for knowledge with a steep learning curve.

Areas of Expertise

Quantum Optics – Nonlinear Optics – Nanophotonics – Quantum Physics – Light-matter interactions

Highlights

Author of 44 peer-reviewed papers (and 4 submitted works). 22 first or equal-first authorship.

Published in or accepted to prestigious peer-reviewed journals such as Science, Nature Photonics, Nature Physics, Science Advances, Nature Communications, Nano Letters, Optica and Physical Review Letters.

Recipient of 7 prestigious and highly competitive doctoral, post-doctoral and early-career fellowships and grants.

Recipient of 14 research, teaching and academic awards. Among which, the Israel Physical Society prize for best PhD thesis in Physics.

Employment

Assistant Professor, Electrical and Computer Engineering

Technion – Israel Institute of Technology (Haifa, Israel) | 2025-

Postdoctoral Researcher, Applied Physics

Stanford University (CA, USA) | 2023-2025

Under supervision of Prof. Shanhui Fan

Lead Physics Lab instructor

Tel Aviv University (Tel Aviv, Israel) | 2020– 2023

Managed the largest course in Tel Aviv University, serving over 1000+ students annually. Led a team of 25 Physics Lab instructors.

Lecturer

Tel Aviv University (Tel Aviv, Israel) | 2019– 2020

Course lecturer: “Mathematical tools for Physics”, managing two teaching assistants.

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Teaching assistant

Tel Aviv University (Tel Aviv, Israel) | 2018 – 2020

Teaching assistant for classical physics 1, and physics lab instructor.

In charge of the advanced physics lab honors program.

Technology physicist

Applied Materials (Rehovot, Israel) | 2016 – 2018

Scanning electron microscopy technology team. The position included research of electron-matter interactions using Monte-Carlo simulations, to study the limits and capabilities of scanning electron microscopy used in the semiconductor industry.

Circuit design engineer

Intel (Petah Tikva, Israel) | 2014 – 2016

Circuit design team. The position included validation and design of analog circuits for wireless connectivity chips.

Education

PhD, Physics

Direct PhD track, under supervision of Prof. Ady Arie and Prof. Ido Kaminer

Tel Aviv University (Tel Aviv, Israel) | 2018-2023

M.Sc., Physics.

Under supervision of Prof. Ady Arie. Course GPA: 98/100

Tel Aviv University (Tel Aviv, Israel) | 2016-2018

B.Sc., Physics. GPA: 98/100 (graduated *summa cum laude*)

Tel Aviv University (Tel Aviv, Israel) | 2014-2017

B.Sc., Electrical Engineering. GPA: 97/100 (graduated *summa cum laude*)

Tel Aviv University (Tel Aviv, Israel) | 2012-2017

Academic Honors and Awards

1. *Andre Deloro Career Advancement Chair* (2025; Technion)
2. VATAT-quantum early-career researcher grant (2025; Council for Higher Education in Israel)
3. *Andrew and Erna Finci Viterbi Foundation* postdoctoral fellowship (2023; Technion, Israel)
4. Zuckerman STEM leadership postdoctoral fellowship (2023; Zuckerman Scholars Program; awarded nationwide to 8 scholars across all academic fields)
5. Israel Physical Society prize for best PhD thesis in Physics (2023; Israel Physics Society. Awarded nationwide to one PhD graduate).

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6. *Urbanek-Chodorow Applied Physics postdoctoral fellowship (2023; Department of Applied Physics, Stanford).*
7. *VATAT-quantum postdoctoral scholarship (2022; Council for Higher Education in Israel)*
8. *Scholarship for excellence in research (2022; Tel Aviv University).*
9. *Scholarship for excellence in research, and honorable mention in teaching (2021; Tel Aviv University).*
10. *Adams fellowship, Israel Academy of Sciences and Humanities (2019; Israel Academy of Sciences and Humanities; awarded nationwide to 8 PhD students across all academic fields)*
11. *Scholarship for excellence in research and teaching, (2019; Tel Aviv University).*
12. *Feder family national award for best student work in communication science, first place (2019).*
13. *Raymond and Beverly Sackler scholarship for excellence in research (2018; Tel Aviv University).*
14. *Prize for excelling research paper (2018; Tel Aviv University's electro optics fund).*
15. *Scholarship for excellence in research and M.Sc. studies, (2018; Tel Aviv University).*
16. *Honors project scholarship, (2016; Tel Aviv University).*
17. *Final Israel award for excelling EE students (2015; awarded nationwide to 10 students by Final Israel).*
18. *Freescall semiconductor scholarship for excelling EE students (2014; Freescall Semiconductor).*
19. *B.Sc. Dean's honor list in Electrical Engineering (EE) and in Physics (2013-2017; Tel Aviv University).*
20. *Adi Lautman program scholarship for excelling students (2013; Tel Aviv University).*
21. *Excelling student scholarship (2012; Tel Aviv University).*

Journal Publications

Submitted ([†]denotes equal contribution):

1. Shay Nadel, Amir Sivan and **Aviv Karnieli**, “Dark state spectroscopy in nonlinear waveguide quantum electrodynamics”, arXiv:2606.11997, submitted (2026)
2. Jakob M. Grzesik, **Aviv Karnieli**, Charles Roques-Carmes, Dylan S. Black, Trung Kiên Lê, Olav Solgaard, Shanhui Fan, Jelena Vučković, “A general framework for interactions between electron beams and quantum optical systems”, arXiv:2601.21385, submitted (2026)
3. Paul-Alexis Mor, Anne R. Kroo, Carson G. Valdez, Marko Šimić, **Aviv Karnieli**, Gabriele Cavicchioli, Zhanghao Sun, Vittorio Grimaldi, Shanhui Fan, Olav Solgaard, David A. B. Miller, and Charles Roques-Carmes, “Separating partially coherent light”, arXiv:2603.15517, submitted (2026)
4. Amit Kam, Charles Roques-Carmes, Shai Tsesses and **Aviv Karnieli**, “Quantum Skyrmions in Mixed States of Light and their Nested Topology”, arXiv:2604.23571, submitted (2026)

Published/Accepted ([†]denotes equal contribution):

5. Jakob M Grzesik, Dominic Catanzaro, Charles Roques-Carmes, Eric I Rosenthal, Guido L van de Stolpe, **Aviv Karnieli**, Giovanni Scuri, Souvik Biswas, Kenneth J Leedle, Dylan S Black, Robert L Byer, Ido Kaminer, R Joel England, Shanhui Fan, Olav Solgaard and Jelena Vučković, “Toward Quantum sensing of electron beams using solid-state spins”, *Proc. Natl. Acad. Sci. U.S.A.* **123** (25) e2531808123 (2026)
6. Amit Kam, Shai Tsesses, Lior Fridman, Yigal Ilin, Amir Sivan, Guy Sayer, Stav Lotan, Kobi Cohen, Amit Shaham, Liat Nemirovsky-Levy, Larisa Popilevsky, **Aviv Karnieli**, Meir Orenstein, Mordechai Segev and Guy Bartal, “Quantum skyrmions and high dimensional entanglement mediated by nanophotonics”, *eLight* **6** 13 (2026)
7. Joshua Foley Comer, Ofir Yesharim, Sarika Mishra, Shashi Prabhakar, Eyal Rozenberg, **Aviv Karnieli**, Ravindra P. Singh and Ady Arie, “Inverse-design-based experimental generation of high-dimensional spatially entangled light”, *Optica Quantum* **4**, 179 (2026)
8. **Aviv Karnieli**[†], Paul-Alexis Mor[†], Charles Roques-Carmes[†], Eran Lustig, Jamison Sloan, Jelena Vučković, David AB Miller and Shanhui Fan, “Variational processing of multimode squeezed light”, *PRX Quantum* **7**, 020311 (2026)
9. Offek Tziperman, David Nabben, Ron Ruimy, Yiqi Fang, Ethan Nussinson, Jacob Holder, Alexey Gorlach, Daniel Kazenwadel, **Aviv Karnieli**, Ido Kaminer, Peter Baum, “Two-electron quantum walks probe entanglement and decoherence in an electron microscope”, *Nature Physics* **22**, 763 (2026)

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10. Clarisse Woodahl, Melanie Murillo, Charles Roques-Carmes, **Aviv Karnieli**, David AB Miller and Olav Solgaard, "On-Chip Laser-Driven Free-Electron Spin Polarizer", *Physical Review Letters* 136 063802 (2026)
11. Shai Tsesses and **Aviv Karnieli**, "Electrically-Tuned Light Topology", News and Views piece for *Nature Physics* 21 1869(2025).
12. Trung Kiên Lê, Daniil M Lukin, Charles Roques-Carmes, **Aviv Karnieli**, Eran Lustig, Melissa A Guidry, Shanhui Fan, Jelena Vučković, "Cavity Quantum Electrodynamics in Finite-Bandwidth Squeezed Reservoir", *Physical Review Applied* 24 034053(2025). Highlighted as Editor's Suggestion.
13. Xihang Shi, Wen Wei Lee, **Aviv Karnieli**, Leon M. Lohse, Alexey Gorlach, Lee Wei Wesley Wong, Tim Salditt, Shanhui Fan, Ido Kaminer, Liang Jie Wong "Quantum Nanophotonics with Energetic Particles: X-rays and Free Electrons", *Progress in Quantum Electronics* 102 100577 (2025)
14. Charles Roques-Carmes[†], **Aviv Karnieli**[†], David A. B. Miller and Shanhui Fan, "Automated modal analysis of entanglement with bipartite self-configuring optics", *ACS Photonics* 12 3285 (2025)
15. Shani Izhak, **Aviv Karnieli**, Ofir Yesharim, Shai Tsesses and Ady Arie, "Pseudospin transverse localization of light in an optical disordered spin-glass phase", *Physical Review Letters* 134 123803(2025)
16. Alexey Gorlach, Solomon Malka, **Aviv Karnieli**, Raphael Dahan, Eliahu Cohen, Avi Pe'er and Ido Kaminer, "Photonic quantum state tomography using free electrons", *Physical Review Letters* 133, 250801 (2024)
17. **Aviv Karnieli**, Offek Tziperman, Charles Roques-Carmes and Shanhui Fan, "Decoherence-free many-body Hamiltonians in nonlinear waveguide quantum electrodynamics", *Phys. Rev. Research* 7, L012014 (2025)
18. **Aviv Karnieli**[†], Charles Roques-Carmes[†], Nicholas Rivera and Shanhui Fan, "Strong coupling and single-photon nonlinearity in free-electron quantum optics", *ACS Photonics* 11 8 3401 (2024).
19. Ron Ruimy[†], **Aviv Karnieli**[†] and Ido Kaminer, "Free-electron quantum optics", *Nature Physics* 21 193 (2025)
20. **Aviv Karnieli**, Nicholas Rivera, Valerio Di Giulio, Ady Arie, F. Javier Garcia de Abajo and Ido Kaminer, "Modeling quantum optical phenomena using transition currents", *Applied Physics Reviews* 11, 031305 (2024)
21. Dolev Roitman, **Aviv Karnieli**, Shai Tsesses, Zahava Barkay and Ady Arie, "Coherent radiation at visible wavelengths from sub-keV electron beams", *Optics Letters* 49, 2013 (2024)
22. **Aviv Karnieli**[†], Shai Tsesses[†], Renwen Yu, Nicholas Rivera, Ady Arie, Ido Kaminer and Shanhui Fan, "Universal and ultrafast quantum computation based on free-electron-polariton blockade", *PRX Quantum* 5 010339 (2024).

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23. Shani Izhak, **Aviv Karnieli**, Ofir Yesharim, Shai Tsesses and Ady Arie, "All-optical spin valve effect in nonlinear optics" *Optics Letters* 49 1025 (2024)
24. Lee Wei Wesley Wong, Xihang Shi, **Aviv Karnieli**, Jeremy Lim, Suraj Kumar, Sergio Carbajo, Ido Kaminer and Liang Jie Wang, "Free electron crystals for enhanced x-ray radiation", *Light: Science & Applications* 13, 29 (2024)
25. Inbar Hurvitz, **Aviv Karnieli** and Ady Arie, "Frequency-domain engineering of bright squeezed vacuum for continuous-variable quantum information", *Optics Express* 31 12 20387 (2023)
26. **Aviv Karnieli** and Shanhui Fan, "Jaynes-Cummings interaction between low energy free-electrons and cavity photons", *Science Advances* 9 eadh2425 (2023).
27. **Aviv Karnieli**[†], Shai Tsesses[†], Renwen Yu[†], Nicholas Rivera, Zhexin Zhao, Ady Arie, Shanhui Fan and Ido Kaminer, "Quantum sensing of strongly coupled light-matter systems using free electrons", *Science Advances* 9 eadd2349 (2023).
28. Roy Shiloh, Norbert Schönenberger, Yuval Adiv, Ron Ruimy, **Aviv Karnieli**, Tyler Hughes, R. Joel England, Kenneth Leedle, Dylan Black, Zhexin Zhao, Pietro Musumeci, Robert Byer, Ady Arie, Ido Kaminer and Peter Hommelhoff, "Miniature light-driven on-chip nanophotonic particle acceleration", *Advances in Optics and Photonics*, 14 862 (2022).
29. **Aviv Karnieli**[†], Dolev Roitman[†], Matthias Liebtrau[†], Shai Tsesses[†], Nika van Nielen, Ido Kaminer, Ady Arie and Albert Polman, "Cylindrical metalens for the generation and focusing of free-electron radiation", *Nano Letters* 22 5641 (2022).
30. Eyal Rozenberg, **Aviv Karnieli**, Ofir Yesharim, Joshua Foley-Comer, Sivan Trajtenberg-Mills, Daniel Freedman, Alexander Bronstein, and Ady Arie, "Inverse design of spontaneous parametric downconversion for generation of high-dimensional qudits", *Optica* 9 602 (2022).
31. Giuseppe Di Domenico, Shaul Pearl, **Aviv Karnieli**, Sivan Trajtenberg-Mills, Irit Juwiler, Hagai S. Eisenberg and Ady Arie, "Direct generation of high brightness path entangled NooN states using structured crystals and shaped pump beams", *Optics Express* 30 21535 (2022).
32. Ofir Yesharim, **Aviv Karnieli**, Steven Jackel, Giuseppe Di Domenico, Sivan Trajtenberg-Mills and Ady Arie, "Observation of the all-optical Stern-Gerlach effect in nonlinear optics", *Nature Photonics* 16 582 (2022)
33. Raphael Dahan[†], Alexey Gorlach[†], Urs Haeusler[†], **Aviv Karnieli**[†], Ori Eyal, Peyman Yousefi, Mordechai Segev, Ady Arie, Gadi Eisenstein, Peter Hommelhoff and Ido Kaminer, "Imprinting the quantum statistics of photons on free electrons", *Science* abj7813 (2021).
34. **Aviv Karnieli**, Yongyao Li and Ady Arie, "The geometric phase in nonlinear frequency conversion" (Review paper), *Frontiers of Physics* 17 12301 (2021)
35. **Aviv Karnieli**, Nicholas Rivera, Ady Arie and Ido Kaminer, "Superradiance and subradiance due to quantum interference of entangled free electrons", *Physical Review Letters* 127 060403 (2021)

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36. **Aviv Karnieli**, Nicholas Rivera, Ady Arie and Ido Kaminer, "The coherence of light is fundamentally tied to the quantum coherence of the emitting particle", *Science Advances*, 7 eabf8096 (2021).
37. **Aviv Karnieli**, Shai Tsesses, Guy Bartal and Ady Arie, "Emulating spin transport with nonlinear optics, from high-order skyrmions to the topological Hall effect", *Nature Communications* 12 1092 (2021)
38. Adi Ben Hayun, Ori Reinhardt, Jonathan Nemirovsky, **Aviv Karnieli**, Nicholas Rivera and Ido Kaminer, "Shaping quantum photonic states using free electrons", *Science Advances* 7 eabe4270 (2021).
39. Chen Mechel, Yaniv Kurman, **Aviv Karnieli**, Nicholas Rivera, Ady Arie and Ido Kaminer, "Quantum correlations in electron microscopy", *Optica* 8, 70-78 (2021).
40. Yongyao Li, Ofir Yesharim, Inbar Hurvitz, **Aviv Karnieli**, Shenhe Fu, Gil Porat, and Ady Arie "Adiabatic geometric phase in fully nonlinear three-wave mixing", *Phys. Rev. A* 101 033807 (2020).
41. Sivan Trajtenberg-Mills, **Aviv Karnieli**, Noa Voloch-Bloch, Eli Megidish, Hagai S Eisenberg, Ady Arie, "Simulating Correlations of Structured Spontaneously Down-Converted Photon Pairs", *Lasers & Photonics Reviews*, 14 1900321 (2020).
42. **Aviv Karnieli**[†], Sivan Trajtenberg-Mills[†], Giuseppe Di Domenico and Ady Arie, "Experimental observation of the geometric phase in nonlinear frequency conversion", *Optica* 6 11 1401 (2019)
43. Roei Remez[†], **Aviv Karnieli**[†], Sivan Trajtenberg-Mills, Niv Shapira, Ido Kaminer, Yossi Lereah and Ady Arie, "Observing the Quantum Wave Nature of Free Electrons through Spontaneous Emission", *Phys. Rev. Lett.* 123, 060401 (2019)
44. **Aviv Karnieli**, Tomer Markovich, and David Andelman, "Surface pressure of charged colloids at the air/water interface", *Langmuir*, 34, 13322 (2018) – (undergrad research project)
45. **Aviv Karnieli** and Ady Arie, "Frequency domain Stern-Gerlach effect for photonic qubits and qutrits", *Optica* 5 1297-1303 (2018).
46. **Aviv Karnieli** and Ady Arie, "All-optical Stern-Gerlach Effect", *Phys. Rev. Lett.* 120 053901 (2018).
47. **Aviv Karnieli** and Ady Arie, "Fully controllable adiabatic geometric phase in nonlinear optics," *Opt. Express* 26, 4920-4932 (2018). (Highlighted in "Spotlight on Optics")
48. **Aviv Karnieli**, Sivan Trajtenberg-Mills, Benoit Boulanger, and Ady Arie, "Modified quasi-phase-matching and spectral shaping in a nonlinear whispering gallery mode resonator", *J. Opt. Soc. Am. B.*, 34(9), 1971-1980 (2017) – (undergrad research project)

Conference Talks and Organization

1. **Invited talk:** WE-Heraeus-Seminar / Quantum Electron Optics 2026, “Towards entangling free electrons using Coulomb and nanophotonic-mediated elastic interactions” (Prague, Czech Republic)
2. **Invited talk:** LPHYS 2026, “Towards entangling free electrons using Coulomb and nanophotonic-mediated elastic interactions” (2026, Belen, Costa Rica)
3. **Invited talk:** IPS 2026, “Towards entangling free electrons using Coulomb and nanophotonic-mediated elastic interactions” (The Hebrew University, Jerusalem, Israel)
4. CLEO, Charlotte, NC, USA (2026): “Signature of nanophotonic-mediated free-electron-free-electron entanglement”
5. CLEO, Charlotte, NC, USA (2026): “Encoding skyrmions in the partial coherence of light”
6. **Invited talk:** PQE, “Towards observation of entanglement in free-electron pairs and free-electron—bound electron systems” (2026, Snowbird, UT, USA)
7. CLEO, Long Beach, CA, USA (2025) “Continuous-variable quantum information processing in real and synthetic dimensions with self-configuring optics”
8. CLEO, Long Beach, CA, USA (2025) “Engineerable many-body Hamiltonians in nonlinear waveguide quantum electrodynamics”
9. **Invited talk:** APS March meeting, special symposium on free electron quantum optics (2025, Anaheim, CA, USA)
10. **Invited talk:** SPIE Photonics West: Quantum West, San Francisco, CA, USA (2025), “Quantum sensing using free electrons”.
11. **Session Chair:** Frontiers in Optics, Denver, Colorado, USA (2024). Topic: “Quantum Information, Communication, and Sensing”
12. Frontiers in Optics, Denver, Colorado, USA (2024): “Coherent generation of decoherence-free states in nonlinear waveguide quantum electrodynamics”
13. **Co-organizer and co-chair:** CLEO, Charlotte, North Carolina USA (2024). Special symposium: “Photonics meets free-electron science”.
14. CLEO, Charlotte, North Carolina USA (2024): “Free-electron ponderomotive guiding for strong coupling and single-photon nonlinearity”.
15. Quantum 2.0, Denver, Colorado (2023): “Jaynes-Cummings interaction between slow free-electrons and cavity photons”.
16. CLEO, San Jose, California USA (2023): “Universal quantum computing with anharmonic photonic cavities and free-electron ancillas”.

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17. CLEO, San Jose, California USA (2023): "Deterministic single-photon generation by strong coupling of slow free electrons and an optical cavity".
18. **Invited talk:** WE-Heraeus-Seminar / Quantum Electron Optics, Nachsholim, Israel (2022): "Quantum sensing of strongly coupled light-matter systems using free electrons"
19. CLEO, San Jose, California USA (2022): "Probing strongly coupled light-matter interactions using quantum free electrons".
20. CLEO, San Jose, California USA (2022): "Focusing free-electron radiation with source-embedded metalenses".
21. ISM2022, Haifa, Israel (2022): "Focusing Smith-Purcell radiation with free-electron-embedded metalenses"
22. **Session chair:** Metanano 2021 Tbilisi, Georgia (remote). Topic: "Free-electron light-matter interaction".
23. **Invited talk:** Metanano, 2021 Tbilisi, Georgia (remote) (2021): "Quantum interference in free-electron light emission"
24. CLEO, San Jose, California USA (2021): "Nonlinear optical spintronics: from skyrmions to Anderson localization".
25. CLEO, San Jose, California USA (2021): "Superradiance and subradiance from entangled free electrons".
26. CLEO, San Jose, California USA (2020): "Optical Skyrmions and a Topological Hall Effect in Artificial Gauge Fields".
27. CLEO, San Jose, California USA (2020): "Unveiling emitter wavefunction size via the quantum coherence of its radiation".
28. QSORT, Erlangen, Germany (2019): "Quantum correlations in electron microscopy"
29. **Invited talk:** QSORT, Erlangen, Germany (2019): "Observing the quantum wave nature of free electrons through spontaneous emission"
30. CLEO, San Jose, California USA (2019): "Spontaneous emission from a wide quantum electron".
31. ICSEE, Eilat, Israel (2018): "Frequency-Domain Stern-Gerlach Effect for Photons".
32. CLEO, San Jose, California USA (2018): "Stern-Gerlach Effect for Photons".
33. IPS conference at Technion, Haifa, Israel (2017): "Fully Controllable Adiabatic Geometric Phase in Nonlinear Optics".

(In addition, co-authored more than 20 other conference proceeding abstracts.)

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Peer Review Service

Nature Photonics, Nature Physics, Optica, Laser and Photonics Reviews, Nanophotonics, Physical Review Letters, Optica Quantum, ACS Photonics, Optics Letters, Optics Express, Physical Review A, Photonics Research, JOSA B

Editorial Service

Editorial Board Member: *Discover Quantum Science* (Springer Nature), starting March 2025

Academic Mentoring

1. **Advanced Physics Lab (undergraduate honors track)** – mentored excelling undergrad physics students through an advanced course where they execute their own proposed experiments.
2. **Shani Izhak (PhD student, Tel Aviv University)** – mentored during undergrad final project and MSc, resulting in conference and journal publications.
3. **Inbar Hurvitz (PhD student, Tel Aviv University)** – mentored during MSc, resulting in conference and journal publications.
4. **Ofir Yesharim (PhD student, Tel Aviv University)** – mentored during MSc, resulting in conference and journal publications.
5. **Chen Mechel (PhD student, Technion)** – mentored during undergrad research project, resulting in a journal publication.
6. **Trung Kiên Lê (PhD Student, Stanford)** – mentored during PhD project, resulting in conference and journal submissions.
7. **Jakob Grzesik (PhD Student, Stanford)** – mentored during PhD project, resulting in conference and journal submissions.
8. **Paul-Alexis Mor (Undergraduate student, École Polytechnique)** – co-mentored during undergraduate internship, resulting in conference publication and journal submission.
9. **Shay Nadel (PhD Student, Technion)** – PhD student, paper in writing.
10. **Yossi Dalal (MSc Student, Technion)** – MSc student.

Volunteering

President of the Optical Society of America student chapter

Tel Aviv University (Tel Aviv, Israel) | 2018-2021

In charge of organizing and coordinating events including scientific lectures by visiting professors and social gatherings.

Physics and Mathematics tutor

Weizmann Institute of Science (Rehovot, Israel) | 2014

Physics and Mathematics tutor for high school students of Jewish-Ethiopian descent.

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Army Service

2008-2011 Served in an elite unit in the IDF Intelligence Branch. The position included intelligence research that required attention to detail. Received an acknowledgement of excellence by the unit commander (2010).