## YOAV SAGI - RESUME

### **PERSONAL DETAILS**

Date of birth: 19/4/1978

E-mail: yoavsagi@technion.ac.il ORCID iD: 0000-0002-3897-1393

Google scholar: <a href="https://scholar.google.com/citations?user=yhSiqYcAAAAJ">https://scholar.google.com/citations?user=yhSiqYcAAAAJ</a>

## **ACADEMIC DEGREES**

2006-2010 PhD in Physics, Weizmann Institute of Science, Rehovot, Israel.

Thesis title: The coherence dynamics and dynamical decoupling in a dense

cold atomic ensemble.

Advisor: Professor Nir Davidson

Thesis was awarded the John F. Kennedy prize and published as part of the

Springer Theses Series.

1999-2002 M.Sc in Physics (Magna Cum Laude), Technion - Israel Institute of

Technology, Haifa, Israel.

Thesis title: Optical Interference with Non-Coherent States. Advisors: Professor Amiram Ron and Dr. Amnon Fisher

1996-1999 B.Sc. (Magna Cum Laude) in Physics and Mathematics (Talpiot excellence

program), Hebrew University, Jerusalem, Israel.

## **ACADEMIC APPOINTMENTS**

2021-today Associate Professor, Technion - Israel Institute of Technology, Haifa, Israel.

2014-2021 Assistant Professor, Technion - Israel Institute of Technology, Haifa, Israel.

2011-2014 Postdoctoral Research Associate, JILA, NIST and the University of

Colorado, Boulder, Colorado, USA.

2011 Postdoctoral fellow, Weizmann Institute of Science, Rehovot, Israel.

### **RESEARCH INTERESTS**

Experimental study of quantum many-body phenomena with ultracold Fermi gases, quantum computation, simulation and sensing using neutral atoms in optical tweezers.

## **TEACHING EXPERIENCE**

Physics 2P 114076 (electricity and magnetism), undergraduate

Student Lab 3 114035 (waves), undergraduate

Optics 114210, undergraduate

Physics 1M 114071 (mechanics and relativity), undergraduate

Selected Topics in Atomic Molecular and Optical Physics 118140, graduate

Quantum Technologies 116083, graduate and undergraduate

### **TECHNION ACTIVITIES**

2019-2021 Helen Diller Quantum Center steering committee

# **DEPARTMENTAL ACTIVITIES**

2016-2018 Physics honors program committee

2015-today Physics representative in Materials Science and Engineering department

2017-2021	Solid State Institute seminar organizer
2021-2022	Physics department colloquium organizer

### **PUBLIC PROFESSIONAL ACTIVITIES**

Journal referee Nature, Proceedings of the National Academy of Sciences, Physical Review

X, Physical Review Letters, Physical Review A, Physical Review E, New Journal of Physics, Journal of the Optical Society of America, Scientific

Reports, SciPost

Grant referee Israel Science Foundation (ISF), United States-Israel Binational Science

Foundation (BSF)

Committee member Israel Science Foundation (ISF), United States-Israel Binational Science

Foundation (BSF)

## **MEMBERSHIP IN PROFESSIONAL SOCIETIES**

Israel Physical Society (IPS), American Physical Society (APS)

### FELLOWSHIPS, AWARDS AND HONORS

2019	Recanati foundation research grant (ISF)
2017	Excellence in teaching award
2014	Fellow, Leaders in Science and Technology
2011	Rothschild Post-Doctoral Fellowship
2011	Awarded Fulbright Post-Doctoral Fellowship (Declined)
2011	The John F. Kennedy Award for outstanding doctoral thesis
2010	Student travel grant, CLEO/QELS 2010 awarded by the American Physical
	Society
2010	Student travel grant, DAMOP 2010, awarded by the American Physical
	Society
2002	M.Sc. awarded magna cum laude, Technion - Israel Institute of Technology
1999	B.Sc. awarded magna cum laude, The Hebrew University of Jerusalem

### **GRADUATE STUDENTS**

## **Completed PhD theses**

- Gal Ness, 2022, "From One to Many: Quantum Dynamics and Interactions of a Single Atom Coupled to Many Degrees of Freedom"
- Constantine Shkedrov, 2020, "High-sensitivity rf and Raman spectroscopy of a quantum degenerate Fermi gas"
- Yanay Florshaim, 2024, "Tunneling and Spatial Adiabatic Passage in Microtraps with few Fermionic Atoms"

### **Completed MSc theses**

- Ilan Meltzer, 2024, "Coherent Splitting and Recombination of Atoms Using Optical Tweezers"
- Anastasiya Vainbaum, 2022, "Floquet engineering and quasi-particle properties in a stronglyinteracting Fermi gas"
- Elad Zohar, 2022, "Degenerate Raman side-band cooling of 40K atoms"
- Oded Zilberman, 2022, "Towards Raman side-band cooling of a single atom in a microscopic optical trap"
- Meny Menashes, 2021, "Characterization of a uniform Fermi gas using Raman spectroscopy"
- Gal Ness, 2018, "Non-Adiabatic Optical Transport of a Quantum Degenerate Fermi Gas"
- Yanay Florshaim, 2017, "Towards Quantum Computation with Ultracold Fermionic Atoms"