Curriculum vitae: Prof. Hadar Steinberg

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CURRENT POSITIONS

2020: Associate Professor in the Racah Institute of Physics, Hebrew University, Jerusalem.
2013 – 2020: Senior lecturer in the Racah Institute of Physics, Hebrew University, Jerusalem.

PREVIOUS POSITIONS

2009-2013: Post Doctoral Fellow, Department of Physics, MIT (PI: Prof. Pablo Jarillo-Herrero).
2007-2009: Post-Doctoral Fellow, Department of Physical Chemistry, Hebrew University (PIs: Prof. Uri Banin, Prof. Oded Millo).

EDUCATION

2002-2007: Ph.D., Condensed Matter Physics, Weizmann Institute of Science (advisor: Prof. Amir Yacoby).
1996-1999: M.Sc., Astrophysics, Tel-Aviv University. Advisor: Prof. Amiel Sternberg
1991-1994: B.Sc., Mathematics and Physics, Hebrew University, "Talpiot" program. Suma cum laude.

HONORS, AWARDS, FELLOWSHIPS (last 10 years)

2015: ERC Starter Grant.
2012: MIT Infinite Kilometer Award for outstanding post-docs.

RESEARCH GRANTS

To date I have received an equivalent of over 3 million Euro from competitive grants including ERC Starter Grant, ISF Personal Research Grant x2, ISF Quantum Program, Israel Ministry of Science and Technology, DFG Germany.

SUPERVISION OF GRADUATE STUDENTS & POSTDOCTORAL FELLOWS

I have supervised 4 Postdocs, 4 PhD students, and 8 MSc students. One of my Postdocs Dr. Moshe Harats, is now a faculty member in Ben Gurion University (Israel).

TEN DISTINCTIVE PUBLICATIONS

1. *Electrically tunable surface-to-bulk coherent coupling in topological insulator thin films*. H. Steinberg, J.-B. Laloë, V. Fatemi, J.-S. Moodera & P. Jarillo-Herrero. **Physical Review B** 84, 233101 (2011).

2. *Photon helicity dependent currents in an optically driven topological insulator*. J. W. McIver, D. Hsieh, H. Steinberg, P. Jarillo-Herrero & N. Gedik. **Nature Nanotechnology 7,** 96-100 (2012).

3. *Observation of Floquet-Bloch states and photo-induced time-reversal symmetry breaking on the surface of a topological insulator.* Y. H. Wang, H. Steinberg, P. Jarillo-Herrero & N. Gedik. **Science 342***,* 453 (2013).

4. *Spectroscopy of bulk and few-layer superconducting $NbSe_2$ with van der Waals tunnel junctions.* T. Dvir , F. Massee, L. Attias, M. Khodas, M. Aprili, C. H. L. Quay, H. Steinberg, **Nature Communications 9**, 598 (2018).

5. *Tunneling into the vortex state of $NbSe_2$ with van der Waals junctions,* T. Dvir, M. Aprili, C. H. L. Quay, H. Steinberg. **Nano Letters 18**, 7845 (2018).

6. *Graphene-based positron charge sensor*. P. Or, D. Dribin, T. R. Devidas, A. Zalic, K. Watanabe, T. Taniguchi, S. May-Tal Beck, G. Ron, H. Steinberg. **Applied Physics Letters 113**, 154101 (2018).

7. *Magnetic-related states and order-parameter induced in a conventional superconductor by nonmagnetic chiral molecules*, H. Alpern, K. Yavilberg, T. Dvir, N. Sukenik, S. Yochelis, E. Grosfeld, H. Steinberg, Y. Paltiel, O. Millo. **Nano Letters 19,** 5167 (2019).

8. *Zeeman Tunability of Andreev Bound States in van der Waals Tunnel Barriers*, T. Dvir, M. Aprili, C. H. L. Quay, H. Steinberg. **Physical Review Letters**, **123**, 217003 (2019).

9. *Quantum-dot assisted apectroscopy of degenercy-lifted landau levels in graphene*, I. Keren, T. Dvir, A. Zalic, A. Iluz, D. LeBoeuf, K. Watanabe, T. Taniguchi, H. Steinberg. **Nature Communications 11***,* 3048 (2020).

10. *Spectroscopy of $NbSe_2$ Using Energy-Tunable Defect-Embedded Quantum Dots,* T. R. Devidas, I. Keren and H. Steinberg, **Nano Letters, 21**, 16, 6931 (2021).