Curriculum Vitae

Name: Amit Kanigel
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Place of Birth: Israel
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Education

1999-2003 - Ph.D. Physics, Physics department, Technion, Israel.
Thesis: "Interplay between magnetism and superconductivity in the cuprates"
1996-1999 – M.Sc, Physics, Physics department, Technion, Israel.
Thesis: "Role of defects in the melting transition"
1992-1995 – B.Sc, Physics, Physics department, Technion, Israel.

Research Interests

Angle Resolved Photoemission spectroscopy.
Superconductivity and in particular electronic structure and magnetic correlations in high temperature superconductors.
Muon Spin Resonance (MuSR).
Single crystal growth.
BEC in solid-state systems.
Topological materials.

Employment

2013 - Associate professor - Physics Department, Technion, Israel.
2007 - 2013 Assistant professor – Physics Department, Technion, Israel.
2004 - 2007 PostDoc in J.C. Campuzano's group, UIC and Argonne National Labs.
2003 - 2004 PostDoc in the group of Prof. Amit Keren at the physics department, Technion, Israel.

Teaching experience

Physics 1m (Mechanics for undergrads)
Physics 2 (Electromagnetism for undergrads)
Teaching labs 1,2,4

Graduate students and Postdoctoral fellows

Students:

Graduated:
Moran Zaberchick, MSc. Superconductivity in TiSe2Cux
Yuval Lubashevsky, PhD. Zn substitution in Bi2212
Montaser Naamne, MSc. Critical current in Bi2212
Elias Lahoud, PhD. Disorder induced metallic phase in Mott insulator
Amitk Ribak, MSc. Topological superconductivity in CuBi2Se3
Muntaser Naamne, PhD, ARPES in the presence of current
Shahar Rinott, PhD, BCS-BEC in FeSeTe
Amit Ribak, PhD, Different ground states of TaS_2.

Yuval Nizav, MSc. Hall anomaly in Bi2212

In progress:
Yaron Jarach PhD, Expected graduation 2021.
Avior Almualem PhD, Expected graduation 2021.
Yuval Nitzav PhD, Expected graduation 2023.
Roni Gofman PhD, Expexted graduation 2023.

Postdocs:
Dr. Robert Wallauer 2013-2014
Dr. Himanshu Lohani 2017-
Dr. Alex Laout 2019-

Other activities
Refereeing
Science, Nature Phsyics, Nature Materials, Nature Comm., PRL,PRB

Committees
Review panel ISF
Review panel BSF
Review panel Ministry of science
Proposals review panel of the Swiss light source 2017-

Honors and Fellowships
2003 Gutwirth prize.
2004 Lady Davis Postdoctoral Fellowship.
2013 The Wolf foundation Krill prize.
2013 The Henri Taub prize.

Grants
1. ISF "Studying the interplay between the superconducting and the pseudogap phases in the cuprates using Zn substitution ", 2008-2011, 948000NIS
2. ISF New faculty equipment "Angle Resolved Photo-Emission Spectrometer (ARPES)", 2008, 200000$
3. GIF young researchers 2008-2009, "Disorder in Mott insulators" 60000$
4. BSF "ARPES with current" 2011-2014 (with J.C. Campuzano) 120000$
5. ISF "The electronic structure of the Iron-chalcogenide super-conductors: A BCS-BEC crossover in a solid-state system", 2013-2016, 1080000NIS
6. BSF "BSC-BEC in Iron based SC", 2015-2018 (With Mohit Randeria) 136800$
7. ISF "Studying the electronic structure of the High Tc superconductors using ARPES in the presence of current", 2018-2021 1400000NIS
8. ISF Institutional equipment, "Physical Properties Measurement System", 2018, 924000NIS
9. MAFAT "Topological IR detector", 2017- (with Netanel Lindner), 160000$
10. MAFAT "HTSC single photon-detector", 2018- (with Alex Hayat), 55000$
11. MOST-Space "Atomic oxygen detectors", 2019-2023 (with Rafi Kalish and Irina Gouzman), 1200000NIS

Invited talks
1. Common energy scale for magnetism and superconductivity in underdoped cuprates: a MuSR investigation of (CaxLa1-x)(Ba1.75-xLa0.25+x)Cu3Oy, High Tc workshop, Virginia US, 2002.
2. Common energy scale for magnetism and superconductivity in underdoped cuprates, Minerva meeting, Blaubeuren, Germany 2003.
3. Common energy scale for magnetism and superconductivity in cuprates, Minerva meeting, Tel Aviv 2005.
4. From Fermi Arcs to Nodal Metal: Scaling of the Pseudogap with

Temperature and Doping, Lattice effect in superconductors, Santa Fe, US 2006.
5. Magnetic penetration depth measurements in NaxCoO2 yH2O. First International workshop on the physical properties of lamellar cobaltates, Orsay, France 2006.
6. CORPES07, Strong Correlations and Angle Resolved Photoemission Spectroscopy, Dresden April 2007.
7. MICUO, Metal Insulator Transition in Cuprates, Parma, March 2008.
8. Aspen summer school, strongly correlated materials, Aspen, July 2009.
9. SUPERSTRIPES11, Rome 2011.
10. 5th Indo-Israeli Conference on Condensed Matter Physics, Cochin 2011.
11. 1th China-Israel Meeting on strongly correlated matarials, Jerusalem 2011.
12. M2S 2012 Washington DC July 2012.
13. APS March meeting, Baltimore 2013.
14. Minerva meeting on Topological Superconductors, Tel Aviv 2015.
15. China-Israeli meeting on Topological insulators, Tel Aviv 2016.
16. SUPERSTRIPES16, Ischia 2016.
17. QSQE17, Wurzburg 2017.
18. Gordon Research Conference on Superconductivity, Waterville NH 2017.
19. CORPES17, Hiroshima, 2017.
20. M2S 2018 Beijing, 2018.
21. Novel superconductors: materials and properties, Stockholm 2018.
22. Nano.IL2018, Jerusalem, 2018.
23. Quantum Criticality and Topology in Correlated Electron Systems, Dresden 2019.