

Curriculum Vitae- Ezekiel Johnston-Halperin

Education

- March 2003* PhD, Physics, University of California, Santa Barbara, “Optical, Magnetic, and Electronic Control of Free Carrier Spin in Semiconductors”
- April 2000* M.A., Physics, University of California, Santa Barbara
- June 1996* B.S. *cum laude*, Physics, Case Western Reserve University

Professional Appointments

July 2007 – present: Assistant Professor: Chemical Physics Program, The Ohio State University

July 2006 – present: Assistant Professor: Department of Physics, The Ohio State University

April 2003 – June 2006: Post-Doctoral Researcher: The California Institute of Technology, Division of Chemistry and Chemical Engineering

Research Supervisor: Professor James R. Heath

September 1996-March 2003: Graduate Student Researcher: The University of California at Santa Barbara, Department of Physics

Thesis Advisor: Professor David D. Awschalom

July 1994 – July 1996: Research Assistant at Case Western Reserve University

Research Supervisor: Professor David E. Farrell

Publications: 29 total publications, 2 in *Science*, 2 in *Physical Review Letters*, and 1 in *Nature*, 3 with 100+ citations; *h-index*: 19.

Presentations: 17 contributed and 13 invited presentations, the latter including the APS March Meeting and the MRS Spring Meeting.

Patents: “Bipolar Spin Transistors and the Application of Same,” *pending*.

Current Funding: *As PI or co-PI:* NSF MRI “Acquisition of a Hybrid Diamond/III-N Synthesis Cluster Tool,” \$600,000 (equipment funds), 10/1/2009 – 9/31/2011; DoE BES “Optical Study of Spin Dynamics in Semiconducting Nanowires,” \$600,000 (EJH share: \$300,000), 8/15/2009 – 5/14/2012; (OSU internal) IMR “Solving the ‘Contact Problem’ of Molecular Electronics via Atomic Layer Deposition,” \$90,000, 7/1/2008 – 6/30/2010; *As Co-I:* NSF MRSEC “Center of Emergent Materials”, \$17,000,000 (EJH share: \$360,000), 9/1/2008 – 8/31/2014.

Expired Funding: NSF SGER “Sublithographic Patterning of Nanoscale Spintronic Devices,” \$75,000, 5/1/2007 – 4/31/2009.

Advisees: Currently advising 6 PhD students and 2 postdoctoral researchers, have graduated 1 Masters and 1 PhD to date.

Service (Research): Member of the following advisory boards: the Institute for Materials Research at OSU Faculty Advisory Board, the Center for Electronic and Magnetic Nanoscale Composite Multifunctional Materials (ENCOMM) Science Board, ENCOMM Nanoscience Laboratory Oversight Board. Member of the Executive Committee of the Center for Emergent Materials (CEM). Co-leader of IRG-1: “Towards Heterogeneous, Spin-Preserving Networks” within the CEM.

Service (Department): Member of the Graduate Studies Committee (September 2006 – August 2009); Member of the Colloquium Committee (September 2007 – August 2008); Member of the Public Relations Committee (September 2009 – August 2010).