

Peter M. Levy: A Brief Autobiography

Peter was born in Frankfurt am Main in 1936, three years before the beginning of World War II. His family left Frankfurt in 1939 and Peter spent a year in Leighton Buzzard, England (a rail junction between Oxford and Cambridge -- already, he was deciding which one to attend!) in a home for the children of refugees established by the Rothschild family, while his parents worked and studied English in London. In 1940 he arrived in New York. His family settled in Washington Heights, which at the time was known as the "Fourth Reich". He attended Brooklyn Technical High School where he developed skills in mechanical drawing and machine shop and foundry practice.

After completing a BME at City College in 1958, Peter studied at Harvard University with John H. VanVleck; he received his PhD in 1963. He spent two years in Grenoble with Louis Néel, and in 1964 returned to the States as a post-doc in physics at the University of Pennsylvania. He worked with Herb Callen on Greens function decoupling schemes. In 1966 he was offered his first teaching position as assistant professor at Yale University, and in 1970 came to the Heights campus of New York University as associate professor. After the Heights campus closed in 1973, he joined the Physics Department at the Washington Square campus. In 1975, he was promoted to full professor. Peter served as Chair of the Physics Department between 1976 to 1982, and again from 1991 to 1997.

At an election eve party in 1964 he met the love of his life, Darline. They have two sons. Erik is in the business world and Serge is a fine arts photographer. Over the years, Darline and Peter have shared interests in music, art, travel and in particular, traveling and living in France; they now spend a portion of their year in Paris.

In his first research projects, Peter investigated the effect of orbital angular momentum on exchange interactions in insulators. Together with Albert Fert, he extended these orbital effects to metals, studying the role of orbital angular momentum in skew scattering and the extraordinary Hall effect due to rare-earth impurities in the transition metals; they also studied the role of angular momentum in the Dzyaloshinsky-Moriya exchange interaction between Mn impurities in Cu, i.e., in spin glasses. When Albert Fert discovered Giant Magnetoresistance in magnetic multilayers with 3d transition-metal ferromagnets in 1988, Peter began working with his student Shufeng Zhang and Albert on the theory of GMR. Over the past twenty years Peter has directed his research to the broader area of spin transport in magnetic multilayers, aka, spintronics. In the mid-nineties, together with Andy Kent and Stuart Parkin, Peter spearheaded an effort, supported by DARPA, to research the fundamentals of magnetic random access memories, MRAM.

Peter's honors include : Summa cum laude, City College (B.M.E.); National Science Foundation Fellow (1958-1962); Fulbright-Hays Award (1975-1976); N.S.F./C.N.R.S. Exchange of Scientists Award (1975-1976) (1983-1984); Medaille de Vermeil, Societe d'Encouragement au Progrès, Paris (1978); Fellow and Vice President for the Physical Sciences of the New York Academy of Sciences 1983-85; Fellow, American Physical Society; Invitation Fellowships from Japan Society for the Promotion of Science (1995, 1997, 2003), and the Chaire Internationale de Recherche "Blaise Pascal", awarded by the Préfet and Région de l'Ile de France (2005).

The Peter Levy Symposium



Picture by Bruno Fert

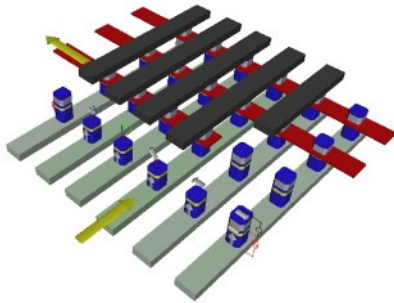
Friday, May 15, 2009
Silver Center
Hemmerdinger Hall

Schedule of Events

9:40 AM Andrew Kent
Welcome & Opening Words

10:00 AM Stuart Parkin
Racetrack Memory: A New Paradigm in Data Storage

10:30 AM Shufeng Zhang
Extension of Levy's Domain Wall Scattering Theory



11:00 AM Coffee Break

11:30 PM Xavier Waintal
Bridging Valet-Fert Theory and Quantum Approaches

12:00 PM Sadamichi Maekawa
Kondo Effect and Spin Hall Effect in Au Metals

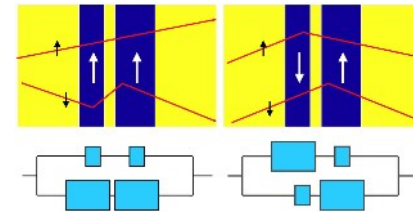
12:30 PM Lunch

2:00 PM Martin Blume

J. H. Van Vleck, Peter, and Van's 'Boys' from the Fifties and Sixties

2:30 PM Albert Fert
Peter in Paris/Grenoble

3:00 PM Horacio Camblong
A Scale-Symmetry Quantum Tour: From Molecules to Black Holes



3:30 Coffee Break

4:00 PM Bill Pratt
Spin-Polarized Transport in Magnetic Multilayers with the Current Perpendicular to the Plane

4:30 PM Peter Weinberger
Boltzmann, Spins and PML

5:30- 7 PM Reception in Physics

7 PM Dinner at Torch Club

Special Thanks to the Sponsors of This Event:

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