**Boulder School for Condensed Matter and Material Physics** 



Conventional electronics depends only upon the charge of the electron. Conventional electronics deponds a property called "spin" - it's where Electrons, however, also possesses the spin languished unused in the magnetism comes from. Until recently spin languished unused in the magnetism comes from. Onen Spintronics puts electron spin the everyday world of electronics, but Spintronics puts electron spin back everyday world of electronics, based on this idea have already had dramatic into the picture. Inventions based on this idea have already had dramatic effects on the home and office today.

effects on the home and office of the IBM Research Almaden Research
Spinmeister Dr Stuart Parkin of the IBM Research Almaden Research Spinmeister Dr Stuart Parking Spinmeister Dr Stuart Parking what spin through this new field, discussing what spin Center will take you for a spin through this new field, discussing what spin center will take you for a spin through this new field, discussing what spin through the spin through this new field, discussing what spin through the spi Center will take you for a spin that spin Center will take you for a spin that spin is and why it matters, how it is being put to use today, and where you might find it tomorrow.

## Thursday July 10, 7:30 pm G1B20 Duane Physics Building, CU Campus

For information, call (303)-492-1515. For Duane Building location, please consult the campus map.

Stuart Parkin is an IBM Fellow and manager of the Magnetoelectronics Group at the IBM Almaden Research Center in San Jose, California. He is a leader in the rapidly growing field of spintronics, and his current work involves the study of magnetic tunnel junctions and the development of a new type of computer memory based upon them. More of his



work is accessible on the web at www.research.ibm.com and www.almaden.ibm.com/st/