College of Natural Sciences & Mathematics
UNIVERSITY OF DENVER

Physics & Astronomy Colloquium

November 6, 12.00 pm, ECS 301



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How Do Electron Spins Relax?

Nuclear and electron spin relaxation processes were outlined by physicists long before techniques were developed to measure spin resonance. Early texts described direct, Raman, and Aminov-Orbach processes. But what is the mechanism by which these relaxation processes occur?

After a quick outline of EPR for those who have not been introduced to the method, spectrometer design goals will be described. Measurement of relaxation of organic radicals, transition metal ions, and lanthanides will be surveyed. It is hoped that students present will be able to explain puzzles that remain.