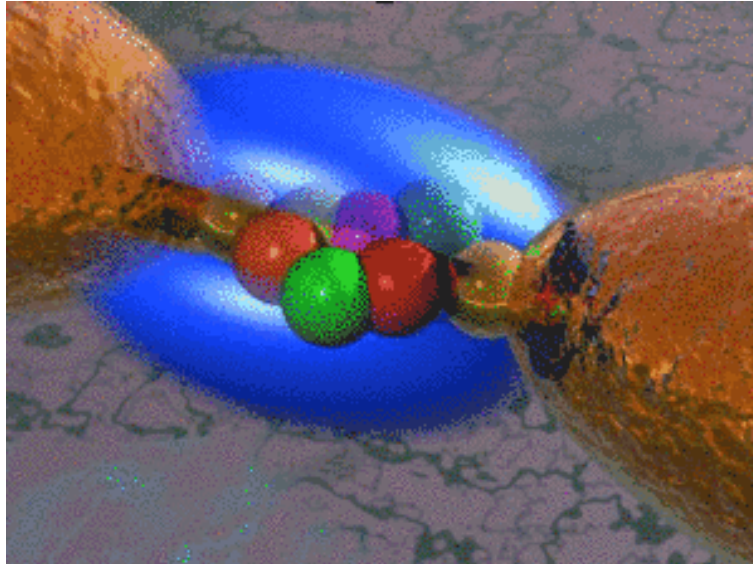


# AMO Seminar

*Friday, February 9, 2009*

*2:00 pm*

*Physics conference room (Small Hall 123)*



## **Ballistic Transport of Electrons through Microjunctions**

Dr. John B. Delos  
*The College of William&Mary*

One can etch submicron-size junctions in semiconductors such as GaAs. If these junctions are made very cold (a few milliKelvin), then the mean free paths of the electrons may be larger than the device. In that situation the system approaches a regime of ballistic transport, in which electrons travel freely through the junction, except for elastic collisions with the walls. Experiments and theory on such systems will be reviewed.