



THE UNIVERSITY OF TEXAS AT ARLINGTON

*Department of Mathematics*



## **Mathematics and Statistics Colloquium**

**Date/Time/Room:** Friday (2/27/2009) at 2:30 p.m. in Room 304 PKH

**Speaker:** Dr. Robert Glassey, Professor  
Department of Mathematics, Indiana University

### ***Equations of Kinetic Theory***

**Abstract:** The equations of Kinetic Theory describe the microscopic motion of gases. Two major systems/equations will be discussed: the Vlasov-Maxwell System of plasma physics (in which electromagnetic forces dominate and collisions are neglected) and the Boltzmann equation for rare gases (in which collisions are dominant.) An outline of the present state of knowledge for both will be given in the context of initial-value problems.

\*Refreshments are served shortly after each presentation. Colloquia talks are 50 minutes long, followed by an open-forum discussion with faculty and graduate students.