

## Departmental Colloquium

*Mark Kac's perspective on kinetic theory*

Michael Loss (Georgia Institute of Technology)

**Abstract:** The goal of kinetic theory is to describe the behavior of a large collection of colliding particles. In 1956 Mark Kac invented a probabilistic model that describes a spatially homogeneous gas. This linear model helps to understand some aspects of kinetic theory, such as molecular chaos which is closely connected to the non-linear Boltzmann equation and approach to equilibrium. In this talk I will give a leisurely introduction to these issues and will also present some newer results.

Friday, March 9 at 3:00 PM in SEO 636