



# UNIVERSITY OF CALIFORNIA RIVERSIDE

DEPARTMENT OF MATHEMATICS

## Colloquium

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**Dr. Chanwoo Kim**  
**University of Cambridge**

“Some recent progress in boundary problems in  
Boltzmann theory”

**Abstract:**

We consider the Boltzmann equation in bounded domain with various boundary conditions. A genuine non-equilibrium steady state is established via constructing the solution of the steady Boltzmann equation with non-constant boundary temperature. We also discuss the validity of the Fourier law in the kinetic regime. Next we discuss the Sobolev regularity of Boltzmann solutions in convex domains.

**Wednesday, November 6<sup>th</sup>, 2013**

**Surge 284**

*Tea Time: 3:40 p.m. / Talk: 4:10 – 5:00 p.m.*