

# UCCS Mathematics

## Colloquium

Thursday September 2<sup>nd</sup>, 2011

UC 307

12:30 pm – 1:30 pm

(Refreshments at 12:15 pm)

**Dr Yasunari Higuchi, Kobe University**

**Dr Masato Takei, Osaka Electro-Communication University**

Critical behavior for percolation in the 2D high-temperature Ising model

Abstract: This talk is based on joint work with Yu Zhang (University of Colorado). We consider the percolation problem for the high temperature Ising model on the two-dimensional square lattice. We derive some scaling relations, provided the critical exponents exist; for 2D Bernoulli percolation, these relations are proved by Kesten.