



THE UNIVERSITY OF
CHICAGO

THE COMMITTEE ON
COMPUTATIONAL AND
APPLIED MATHEMATICS

COLLOQUIUM

KNUT SOLNA

Department of Mathematics,
University of California at Irvine

**Some aspects of waves in random media and imaging with
incoherent waves.**

WEDNESDAY, June 17th at 4:00 PM
Jones 303, 5747 S. Ellis Ave, Chicago, IL 60637

ABSTRACT

We consider some aspects of waves in random media and imaging with incoherent waves. We consider first a situation with a random interface and imaging of a source hidden behind the rough interface. It is a classic observation that the resolution then depends on the position of the interface. This is the so called ‘shower curtain effect’ and the problem has been analyzed in the context of bulk scattering before while here present recent results when we model with a rough interface. In the second part of the talk we will discuss imaging with incoherent waves reflected from an extended random medium section.

Organizers:

Guillaume Bal, Department of Statistics (CCAM), guillaumebal@uchicago.edu & Nisha Chandramoorthy, Department of Statistics (CCAM), nishac@uchicago.edu, Daniel Sanz-Alonso, Department of Statistics (CCAM), sanzalonso@uchicago.edu

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