

The Department of Mathematical Sciences

Invites you to a colloquium with

Professor Gunther Uhlmann

University of Washington

Friday, November 30, 2012

Rm 3210 RecCenter

4 – 5 pm

Inside-Out: Inverse Problems

We give a general introduction to inverse problems and in particular to Calderon's inverse problem. Calderon's problem consists in finding the electrical conductivity of a medium by making voltages and current measurements at the boundary. In mathematical terms one tries to determine the coefficient of a partial differential equation by measuring the corresponding Dirichlet-to-Neumann map. This problem arises in geophysical prospection and it has been proposed as a diagnostic tool in medical imaging, particular early breast cancer detection. We will also describe some recent progress on this problem.

Refreshments will be served at 3:15 – 3:45 pm in the Faculty & Graduate Student Lounge, Room 4118 French Hall

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