

Meeting: 1001, Evanston, Illinois, SS 7A, Special Session on Geometric Partial Differential Equations

1001-35-115 **Gunther Uhlmann*** (gunther@math.washington.edu), Department of Mathematics, University of Washington, Box 354350, Seattle, WA 98195-4350. *The Calderón problem with partial data.*

We will discuss some recent results on the problem of whether one can determine the electrical conductivity of a medium by making voltage and current measurements on part of the boundary. The information is encoded in the local Dirichlet-to-Neumann map associated to the conductivity equation. (Received August 18, 2004)