Meeting: 1003, Atlanta, Georgia, SS 30A, AMS Special Session on Analysis Problems in Modern Physics, I

Gunther Uhlmann* (gunther@math.washington.edu), Department of Mathematics, University of Washington, Box 354350, Seattle, WA 98195. The Dirichlet-to-Neumann map with partial data. We survey some recent results on the problem of determining the electrical conductivity of a medium by making electrical measurements of the associated Dirichlet-to-Neumann map on open subsets of the boundary. (Received October 03, 2004)