DIFFERENTIAL GEOMETRY/PDE SEMINAR

Wednesday, May 1, 2002
Thomson 134
3:45 pm

Inverse problem for the transport equation with anisotropic scattering kernel

Alexander Bukhgeim
(Sobolev Institute of Mathematics, Russia)

We consider the problem of recovering the right hand side of the stationary one-velocity transport 2D equation with arbitrary smooth attenuation and smooth anisotropic scattering term with sufficiently small norm of the anisotropic part. It was proved that “half” of the Cauchy data determines the right hand side uniquely. These problems arise in different industrial and medical applications. We also prove stability estimates for this problem.

For more information about this seminar, visit the DG/PDE Seminar Web page (from the Math Department home page, `www.math.washington.edu`, follow the link **Seminars, Colloquia, and Conferences**).