APPLIED MATHEMATICS COLLOQUIUM

Integrability, Medical Imaging, and Boundary Value Problems

Thanasis Fokas
(University of Cambridge)

Abstract:
Ideas and techniques of Integrability have had a significant impact in several areas of science and engineering. In this lecture, two such applications will be reviewed: (a) an analytical approach to certain important medical imaging techniques; (b) a unified approach to analyzing boundary value problems. The latter approach unifies the fundamental contribution to the analytical solution of PDEs of Fourier, Cauchy and Green, and also presents a non-linearization of some of these results.

Monday November 16th 2009
4:30 PM
Building 4, Room 370
Refreshments are available in Building 2, Room 290
(Math Common Room) between 3:30 – 4:30 PM