



Speaker: Dionyssis Mantzavinos
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Tuesday, October 2, 2012
11:00 AM
258 Hurley Hall

Title: Initial-boundary value problems for linear and integrable nonlinear evolution PDEs

Abstract:

We shall discuss the solution of certain initial-boundary value problems for evolution PDEs following an approach introduced by Fokas in 1997. This approach is based on the spectral analysis of an appropriate Lax pair for the relevant PDE, while the associated spectral variable lies in the complex plane. We shall begin by looking at linear equations and subsequently shall discuss the extension of the method to their nonlinear counterparts.