

SPEAKER: Russell Brown, University of Kentucky

TITLE: A scattering map in two dimensions

Abstract:

We consider the scattering map introduced by Beals and Coifman and Fokas and Ablowitz that may be used to transform one of the Davey-Stewartson equations to a linear evolution. We give mapping properties of this map on weighted L^2 Sobolev spaces that mimic well-known properties of the Fourier transform. This is joint work with N. Serpico, P. Perry and K. Ott.