SPEAKER:

Landon Gauthier, University of Kentucky

TITLE:

Determining Rough First Order Perturbations of the Polyharmonic Operator

ABSTRACT:

In this talk we will show that knowledge of the Dirichlet to Neumann map is enough to uniquely determine first and zero order terms in an operator where the principal part is the polyharmonic operator. This proof is due to Yernat Assylbekov and Karthik Iyer in 2017. The main interest of their work is the reduced regularity hypotheses on the lower orders of the operator. The key tools are using Geometric Optics Solutions and an integral identity relating the operator and the adjoint.