



2009 - 2010



**MATHEMATICS COLLOQUIUM SERIES
UNIVERSITY OF CENTRAL FLORIDA**

**Dr. Alexandre Timonov
Department of Mathematics
University of South Carolina Upstate,
Spartanburg, South Carolina**

will speak on

**“Reconstructing the conductivity from
the interior data: Numerical aspects”**

ABSTRACT: In this talk two algorithms for the numerical solution of the inverse conductivity problem are considered. In the first formulation, the Cauchy data on a part of the boundary and the magnitude of the current density are assumed to be measured. In the second formulation, only the magnitude of the current density is measured, whereas the assigned voltage potential is maintained on the boundary. The computational feasibility of both algorithms is demonstrated in numerical experiments.

DATE: Thursday, October 15, 2009

TIME: 11:00am – 12:00pm

PLACE: MAP 318

Everyone is cordially requested to attend.