

## 2012-2013 Analysis and Applied Math Seminar

**Friday, September 7, 2012**

Alex Stokolos, Georgia Southern University  
*"BMO, Muckenhoupt weights and the Gurov-Reshetnyak condition"*

**Friday, September 14, 2012**

Vladimir Bondarenko, Georgia State University  
*"Modeling Action Potential Generation and Propagation in Normal and Diseased Mouse Hearts"*

**Wednesday, September 19, 2012 – SPECIAL DAY AND TIME**

Chui-Jie Wu, Dalian University of Technology, China  
*"Theory of optimal dynamical systems & applications in fluid mechanics"*

**Friday, October 5, 2012**

Umberto Villa, Emory University  
*"Towards Scalable Solvers for the Brinkman Problem"*

**Friday, October 12, 2012**

Jun Ji, Kennesaw State University  
*"Two new methods for the Moore-Penrose inverse of a matrix"*

**Friday, October 26, 2012**

Dhruba Adhikari, Southern Polytechnic State University  
*"Topological Degree Theories and Nonlinear Operator Equations in Banach Spaces"*

**Friday, November 2, 2012**

Antonio Golubski, Kennesaw State University, Department of Biology  
Models of resource uptake, recycling, and competitive outcomes between plants of different sizes

**Friday, November 9, 2012**

Marius Florin Niculescu, Georgia Tech - Scheller College of Business  
*"Engineering Optimal Network Effects via Social Media Features and Seeding in Markets for Digital Goods and Services"*

**Friday, November 16, 2012**

Flavio Fenton, Georgia Tech School of Physics  
*"From Chaos to Cures; controlling the complex spatiotemporal dynamics of cardiac arrhythmias with a mathematical and experimental integrative approach"*

**Friday, November 30, 2012**

Ryan Anderson, Kennesaw State University  
*"Simultaneous approximation of a function and its derivatives by tensor product linear splines"*

**Friday, January 25, 2013**

Dr. Yuliya Babenko, Kennesaw State University  
*"Approximation on a class and adaptive approximation by harmonic splines"*

**Monday, February 4, 2013 – SPECIAL DAY AND TIME**

Alex Stokolos, Georgia Southern University  
*“Some adventures of Besicovitch sets”*

**Friday, February 22, 2013**

Dr. Liancheng Wang, Kennesaw State University  
*“Backward Bifurcation in a Mathematical Model for HIV Infection in vivo with Anti-Retroviral Treatment”*

**Friday, March 22, 2013**

Dr. Tiziano Passerini, Emory University  
*“4D image-based simulations of blood flow in moving domains”*

**Friday, March 29, 2013**

Dr. Alexandra Smirnova, Georgia State University

**Friday, April 5, 2013**

Luca Bertagna, Emory University  
*“A POD approach for image-based parameter estimation in hemodynamic”s*

**Friday, April 12, 2013**

Dr. Dmytro Skorokhodov, Dnepropetrovsk National University, Ukraine  
*“On sharp Kolmogorov type inequalities for functions defined on a finite interval”*

**Friday, April 19, 2013**

Dr. Suzanne Weekes, Worcester Polytechnic Institute  
*“A Multi-compartment Mathematical Model of Cancer Stem Cell Driven Solid Tumor Growth Dynamics”*