MATHEMATICS DEPARTMENT SEMINAR SCHEDULE
September 30 – October 4, 2002

All seminars are held in Boyd Graduate Studies unless otherwise noted

MONDAY, September 30, 2002

Group Representation & Cohomology
2:30pm, Room 410
Speaker: Kenyon Platt, University of Georgia
Title of talk: *"Blocks of Modular representation"*

Topology
2:30p.m.Room 326
Speaker: Aaron Abrams, University of Georgia
Title of talk: *"More on left-orderability and topology", continued*

Faculty and Graduate Social
3:00 p.m., Room 409
Coffee, Tea, Cookies

Analysis
3:30pm, Room 222
Speaker: Akos Magyar, University of Georgia
Title of talk: *"On the distribution of lattice points on surfaces defined by polynomials", continued*
Abstract: Continuation of the previous talk, mainly the case of spheres will be discussed.

Cats
3:30 p.m., Room 328
Speaker: Jianping Zhu, UGA Computer Science graduate student
Title of talk: *"Finding Dominators in Digraphs Fast"*
Abstract: A vertex v dominates another vertex w in a digraph with root vertex r if every path from r to w contains v. A fast algorithm for finding dominators is presented. The algorithm uses depth-first search and an efficient method of computing certain functions defined on paths in trees. A simple implementation of the algorithm runs in O(mlogn) time, where m is the number of edges and n is number of vertices in the digraph.

Numercial Analysis
3:30pm, Room 410
Speaker: MingJun Lai , University of Georgia
Title of talk: *"Convergence of Subspace Decomposition and Correction Methods"*

TUESDAY, October 1, 2002

VIGRE
2:00 p.m-3:15 p.m., Room 304
Speaker: Danielle Arcara, University of Georgia
Title of talk: *Can't define a map? Just blow it up!*
Abstract: My main goal is to explain the process called blow-up and its use in algebraic geometry. First, we go through a quick review of the main objects in algebraic geometry and the maps between them. Then we explore the concept of blow-up through examples. If time allows, I will show how I use blow-ups in my current research.

Algebraic Geometry
3:30 p.m., Room 326
No Meeting this week

Student Number Theory
3:30 p.m., Room 303
Speaker: TBA
Title of talk: *"TBA"*

WEDNESDAY, October 2, 2002

Wavelet Analysis
10:10 – 11:00 a.m., Room 410
Speaker: Kyunglim Nam, University of Georgia
Title of talk: *"Tight Frames", continued*

Graduate Teaching Seminar
2:30 p.m., Room 303
No Meeting this week

Faculty and Graduate Social
3:00 p.m., Room 409
Coffee, Tea, Cookies

Lie Theory
3:30 p.m., Room 302
Speaker: David Hemmer, University of Georgia
Title of talk: *"Specht filtrations for Hecke Algebras of Type A"*
Abstract: I will discuss some very recent joint results with Nakano about modules for the Hecke Algebras of Type A which have filtrations by Specht modules. For example our results imply that for $p>3$, if a module for the symmetric group has a filtration by Specht modules than the multiplicities are well defined. This surprising result is not true for $p=2$ or $p=3$.

Number Theory
3:30 p.m., Room 304
Speaker: Sungkon Chang, University of Georgia
Title of talk: *"The theory of complex multiplication for elliptic curves, and Hasse-Weil L-function"*

FRIDAY, October 4, 2002

Geometry
2:30 p.m., Room 322
Speaker: TBA
Title of talk: *"TBA"*