

MATHEMATICS DEPARTMENT SEMINAR SCHEDULE
January 21 - 25, 2002

All seminars are held in Boyd Graduate Studies unless otherwise noted.

MONDAY, January 21, 2002

MLK Birthday
University Holiday

TUESDAY, January 22, 2002

VIGRE

2:00 p.m. – 3:15 p.m., Room 304

Speaker: Damon Gang, University of Georgia

Title of talk: *"Construction of orthonormal compactly supported wavelets"*

Abstract: I will discuss how to actually compute solutions to specific length four, six, eight, ten, and twelve filters. Some problems that arise (increasingly complicated transcendental equations) will be mentioned. This talk should give anyone interested in joining the wavelets group enough information to get started.

Algebraic Geometry

3:30 - 5:00p.m., Room 326

Speaker: Valery Alexeev, University of Georgia

Title of talk: *"Stable varieties with reductive group action" (cont.)*

Analysis

3:30 p.m., Room 304

Speaker: Ed Azoff, University of Georgia

Title of talk: *"On completely positive maps"*

Abstract: A map ϕ from M_n to itself is k -positive in case its tensor product with the identity defines a positive map from $M_n \otimes M_k$ to itself. ϕ is completely positive if it is k -positive for all k . The concept was introduced by W. Stinespring in 1955. The search for the minimal value of k (as a function of n) such that k -positivity implies complete positivity culminated in a recent paper of R. Timoney. I will outline a variant of Timoney's proof due to J. Li and Z. Pan which forges a surprising connection between complete positivity and invariant subspaces.

Student Number Theory

3:30 p.m., Room 302

Speaker: Steve Donnelly, University of Georgia

Title of talk: *"Factoring primes"*

WEDNESDAY, January 23, 2002

Group Representation and Cohomology

Room 410, 2:30 - 3:20

Speaker: Graham Matthews, University of Georgia

Title of talk: *"Representation of symmetric groups"*

Faculty and Graduate Social

3:00 p.m., Room 409

Coffee, Tea, Cookies

FRIDAY, January 25, 2002

Geometry

2:30 p.m., Room 326

Speaker: Jason Cantarella, University of Georgia

Title of talk: *“The numerical analysis of Writhe (and lots of open problems about non-closed curves)”*