

**University of Georgia**  
**Department of Mathematics**

**Seminar Schedule**  
**February 27 – March 3, 2006**

*All Seminars are held in Boyd Graduate Studies Bldg. unless otherwise noted.*

**MONDAY, February 27, 2006**

**VIGRE-Algebraic Geometry**

2:00pm, Room 304

**Topology/Geometry**

2:30pm Room 222

*Please note this week's seminar will be held on Friday, March 3, 2006*

**Algebra**

2:30pm, Room 410

**Speaker:** Jon Carlson, University of Georgia

**Title of talk:** *Steenrod Operations and group cohomology.*

**Abstract:** This is the second in a series of two lectures on Steenrod operations and how they apply to group cohomology. The Steenrod operations are secondary cohomology operations that are useful in both algebra and topology. In the first lecture we will try to give an overview of why the operations exist and some properties of the algebras. If time allows, we will begin a construction of the operations.

**Faculty and Graduate Student Social**

3:00pm, Room 409

Coffee, Cookies, Tea

**TUESDAY, February 28, 2006**

**VIGRE-Graduate Student Seminar**

2:00p.m., Room 304

**Speaker:** Rod Canfield, Department of Computer Science, University of Georgia

**Title of talk:** *Introduction to the Circle Method*

**Abstract:** The circle method is a technique for applying Cauchy's integral theorem (from complex variables) to problems arising in combinatorics and number theory. We will provide an introduction, based on two examples.

**WEDNESDAY, March 1, 2006**

**Geometry in the Curriculum Seminar**

1:25pm, Aderhold, Room 111

**Speaker:** Sybilla Beckmann Kazez, University of Georgia

**Title of talk:** *The National Council of Teachers of Mathematics' Forthcoming Curriculum Focal Points for Grades PreK - 8*

**Algebraic Geometry**

2:30pm, Room 410

**Speaker:** Elham Izadi, University of Georgia

**Title of talk:** *ampleness of an intersection of two theta divisors*

**Abstract:** I will explain what it means for an algebraic variety to have an ample cotangent bundle and how this leads to some interesting properties of the variety. I will then sketch a proof of the ampleness of the cotangent bundle of an intersection of two translates of the theta divisor in an abelian fourfold. This is joint work with Olivier Debarre.

**VIGRE- Algebra**

2:30pm, Room 303

**Faculty and Graduate Student Social**

3:00pm, Room 409

Cookies, Coffee, Tea

**Arithmetic Geometry/Number Theory**

3:30pm, Room 304

**Speaker:** TBA

**Title of talk:** *TBA*

**THURSDAY, March 2, 2006**

**VIGRE – Feynman Diagrams**

2:00pm, Room 326

**VIGRE – Cardiac Physiology**

2:00pm, Room 640

**VIGRE- Zeta Functions**

2:15pm, Room 302

**VIGRE-Algebraic Geometry**

2:00pm, Room 304

**FRIDAY, March 3, 2006**

**Probability Theory**

2:30-3:30pm, Room 303

**Speaker:** Lirong Yu, University of Georgia

**Title of talk:** *Piecewise Non-linear Filtering*

**Topology/Geometry**

2:30pm Room 222

**Speaker:** Thang Le, Georgia Tech

**Title of talk:** *The Jones polynomial and the A-polynomial of knots.*

**Abstract:** We discuss the AJ conjecture (of Garoufalidis) which relates the Jones polynomial and the A-polynomial of knots. We prove the conjecture for a large class of 2-bridge knots.