

**University of Georgia
Department of Mathematics**

**Seminar Schedule
January 16, 2006 - January 20, 2006**

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

MONDAY, January 16, 2006

MLK Holiday

TUESDAY, January 17, 2006

VIGRE-Graduate Student Seminar

2:00p.m., Room 304

Speaker: TBA

Title of talk: TBA

Ed Azoff Tea Social

3:00pm, Room 409

Coffee, Cookies, Tea

Colloquium

3:30pm, Room 302

Speaker: Evgeni Tevelev, Univ. of Texas at Austin

Title of talk: *Equations of the moduli space of stable rational curves*

Abstract: At the most basic level, algebraic geometry studies (systems of) polynomial equations and the geometry of their solutions. Nowadays algebraic varieties are usually defined in an abstract functorial way and their equations (if one can find them!) provide an important information about their geometry, deformations, degenerations, etc. I will explain when equations are considered nice (Green-Lazarsfeld properties and Koszul algebras). I'll describe joint work with Sean Keel where we find equations in the Lie operad of the moduli space of stable rational curves .

WEDNESDAY, January 18, 2006

Geometry in the Curriculum Seminar

1:25pm, Room 111, Aderhold

Speakers: Tom Banchoff and Clint McCrory

Organizational Meeting

This teaching seminar will explore the role of geometry in the college and pre-college curriculum. For mathematicians this is an opportunity to learn what geometry is taught in public schools these days, and what is required of Math Ed and Elementary Ed majors.

Tom will discuss what he's doing in vector calculus (MATH 2500) this term, and Clint will discuss the geometry course for Math Ed majors (MATH 5200). If you are curious about Tom's internet-based courseware, this is the place to learn more about it.

Arithmetic Geometry/Number Theory

3:30pm, Room 304

Speaker: TBA

Title of talk: TBA

VIGRE- Algebra

3:45pm, Room 303

Speaker: Brian Boe, University of Georgia

Title of talk: *Proof of Kostant's Theorem*

THURSDAY, January 19, 2006

VIGRE – Feynman Diagrams

2:00pm, Room 326

VIGRE – Cardiac Physiology

2:00pm, Room 640

Ed Azoff Tea Social

3:00pm, Room 409

Coffee, Cookies, Tea

Colloquium

3:30pm, Room 302

Speaker: Wee Lian Gan, MIT

Title of talk: *Symplectic reflection algebras and quantum Hamiltonian reduction*

Abstract: Symplectic reflection algebras of wreath-product type give noncommutative deformations of the symmetric products of Kleinian singularities. The representation theory of these algebras is expected to be closely related to the geometry of Hilbert schemes of points on minimal resolutions of the Kleinian singularities. I will give an overview of some recent developments.

FRIDAY, January 20, 2006

Probability Theory

2:30-3:30pm, Room 303

Speaker: Qing Zhang, University of Georgia

Title of talk: *Filtering theory*