

**MATHEMATICS DEPARTMENT SEMINAR SCHEDULE**  
**January 6 – 10, 2003**

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

**WEDNESDAY, January 8, 2002**

**Graduate Student Seminar**

2:30 p.m., Room 302

**Speaker:** Tanya Cofer, University of Georgia

**Title of talk:** *Syllabi and first week issues*

**Faculty and Graduate Social**

3:00 p.m., Room 409

Coffee, Tea, Cookies

**THURSDAY, January 9, 2003**

**Faculty and Graduate Social**

3:00 p.m., Room 409

Coffee, Tea, Cookies

**Colloquium**

3:30 p.m., Room 304

**Speaker:** Professor Michel Brion (Institut Fourier)

**Title of talk:** *Geometry of flag manifolds*

**Abstract:** Flag manifolds are projective algebraic varieties having many symmetries; examples include projective spaces, quadrics, grassmanians.... The talk will discuss some basic questions on algebraic subvarieties of complex flag manifolds. To any such variety, one can attach numerical invariants that generalize the degree of a subvariety of projective space. This raises the following problems, which are easy in projective space and quite open in general: do there exist subvarieties with prescribed numerical invariants? Among them, do there exist smooth ones? What about subvarieties with the smallest numerical invariants?