COLLOQUIUM
UNIVERSITY OF PITTSBURGH
THURSDAY, JANUARY 11, 2007
704 THACKERAY HALL
3:00 P.M.

SPEAKER: PROFESSOR IZZET COSKUN*

DEPARTMENT OF MATHEMATICS
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

TITLE: THE GEOMETRY OF GRASSMANNIANS
AND FLAG VARIETIES

ABSTRACT: A Littlewood-Richardson rule is a positive rule for computing the structure constants of the cohomology ring of flag varieties with respect to their Schubert basis. In recent years new geometric Littlewood-Richardson rules have led to the solution of many important problems, including Klyachko, Knutson and Tao’s solution of Horn’s conjecture and Vakil’s solution of the reality of Schubert calculus. In this talk I will survey some of the basic geometric ideas that underlie geometric Littlewood-Richardson rules.

Refreshments served at 2:30 p.m.
in the Math Dept. COMMON ROOM, Thackeray 705

*The speaker is a candidate for a position in the Department.