

# TEMPLE UNIVERSITY MATHEMATICS COLLOQUIUM

**Susan Sierra**

Princeton University

will speak on

## **Low-dimensional noncommutative geometry**

ABSTRACT: The correspondence between commutative graded rings and projective algebraic varieties is well-known. Perhaps surprisingly, geometric techniques have also been highly successful in understanding noncommutative graded rings, particularly those of low dimension (less than or equal to 3). We survey current research in this area, including our recent classification of “birationally commutative projective surfaces,” and discuss open problems. This talk is intended for a general audience.

MONDAY, 16 NOVEMBER 2009

LECTURE AT 4:00 PM

COFFEE, TEA, AND REFRESHMENTS FROM 3-5 PM

ROOM 617, WACHMAN BUILDING

DEPARTMENT OF MATHEMATICS