Massachusetts Institute of Technology Department of Mathematics

SPECIAL JOINT SEMINAR: LUNCH SEMINAR FOR GRAD STUDENTS & D.W. WEEKS LECTURE SERIES

Monday, April 25, 2011 12:00 - 1:00 PM

ROOM 4-231

Susan J. Sierra

(PRINCETON UNIVERSITY)

"What is a Noncommutative Polynomial Ring?"

Abstract

The ring $S := C[x_1, x_2, ..., x_n]$ of polynomials in n variables is certainly the nicest possible commutative ring (that is not a field). What properties would a noncommutative generalization of S have? We'll talk about some possible answers and their positives and negatives. In the process, we'll discuss mathematics covering (at least) the period 1890 to 2011, with an appropriate pause to acknowledge Emmy Noether, the founder of ring theory.

Followed by pizza in room 2-290