Graduate Seminar in Mathematics

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Thursday, November 6, 2014 1:00-2:00 pm HH-3017

Rings of Matrices

Abstract:

Given a ring R and a positive integer n, the set of all n by n matrices with entries from R forms a ring under matrix addition and matrix multiplication. Such a ring is called the n by n matrix ring over R. Matrix ring is a major subject in noncommutative algebra. Here, I will talk about some other ways, which are new and not available in any text book, to form a ring structure from the set of these matrices. The significance of this ring structure is also explained.