

Algebra Seminar

Speaker:

**Yiqiang Zhou,
Memorial University**

Wednesday, March 14, 2018

2:00 p.m., HH-3017

An embedding theorem on triangular matrix rings

Abstract:

Every matrix in the triangular matrix ring $T_n(R)$ over a bleached local ring R is similar to a "simple form", which is, in most cases, contained in a subring S of $T_n(R)$ with S isomorphic to a direct product of two triangular matrix rings over the same ring R of smaller size. This result, called the embedding theorem, suggests a new approach for handling triangular matrix rings. It is applied to proving several results on decompositions of triangular matrices.