

1046-11-349

David Hannasch* (davidh@egr.unlv.edu), **Rene Ardila**, **Audra Kosh**, **Hanah McCarthy**,
Ryan Rosenbaum, **Donald Adams** and **Vadim Ponomarenko**. *Matrix Number Theory:
Factorization in Integral Matrix Semigroups*. Preliminary report.

Factorization theory is a prominent field of mathematics; however, most previous research in this area lies in the commutative case. Noncommutative factorization theory is a relatively new topic of interest. This talk examines the factorization properties of noncommutative atomic semigroups of matrices, including results on the minimum and maximum length of atomic factorizations, the elasticity and the delta set of the semigroups. (Received August 27, 2008)