

1128-15-31 **Mashaël Albaidani*** (mashaël.albaidani@wsu.edu), Pullman, WA 99163. *Properties of Nonnegative Matrices That are True for General Matrices*. Preliminary report.

In this talk we will explore properties established for nonnegative matrices that hold in a more general context. In particular, we show that if a matrix A has the property that $\text{index}_0(A) \leq 1$, and g is a positive integer such that for all distinct eigenvalues λ and μ , it follows that $\lambda^g \neq \mu^g$, then there is a permutation matrix P such that PAP^{-1} and PA^gP^{-1} are in Frobenius normal form with the same block partitioning. (Received January 26, 2017)