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**Masaki Ogura\*** ([masaki.ogura@ttu.edu](mailto:masaki.ogura@ttu.edu)), Texas Tech University, Department of Mathematics and Statistics, Broadway and Boston, Lubbock, TX 79409, and **Clyde F Martin** ([clyde.f.martin@ttu.edu](mailto:clyde.f.martin@ttu.edu)). *A Characterization of Joint Spectral Radius with the  $p$ -radius of Distributions.*

In this talk we show a novel characterization of joint spectral radius, which is an extension of the spectral radius of a single matrix to a set of matrices. We show that the joint spectral radius of a set equals the limit of the so-called  $p$ -radius of an associated probability distribution when  $p$  tends to  $\infty$  under mild assumptions on the distribution. The obtained formula extends a characterization of the joint spectral radius of a finite set of matrices in the literature by allowing the set to have infinitely many matrices. (Received January 13, 2014)