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**Horst R Thieme\*** ([hthieme@asu.edu](mailto:hthieme@asu.edu)), School of Mathematical and Stat. Sciences, Arizona State University, Tempe, AZ 85287-1804. *The spectral radius of homogeneous operators as threshold between persistence and extinction in discrete-time population models.* Preliminary report.

If discrete-time population models with infinite dimensional structure incorporate two sexes or are modeled in the space of measures with the flat norm, the first order approximation at 0 may not longer be a linear positive bounded operator on an ordered normed vector space but just a homogeneous order-preserving operator on its cone. The concept of a spectral radius can be extended to such operators so that it still acts as threshold between population persistence and extinction. (Received September 11, 2017)