

1145-15-773

Wasin So* (wasin.so@sjsu.edu). *On the Spectral Radius of an Equitable Quotient Matrix*. Preliminary report.

Let M be a partitioned matrix with blocks M_{ij} whose rows have a constant sum b_{ij} . Then the smaller matrix $B = [b_{ij}]$ is called the equitable quotient matrix of M . It is known in literature that the spectrum of B is contained in the spectrum of M (including algebraic multiplicity). In this talk, we investigate the equality of the spectral radii of M and B , and the structure of the associated eigenvectors under the additional assumption that M is nonnegative. (Received September 14, 2018)