

1154-47-2258

Amudhan Krishnaswamy-Usha* (amudhan@math.tamu.edu) and **Ken Dykema**. *Spectral operators in finite von Neumann algebras*.

For operators in a finite von Neumann algebra, Haagerup and Schultz showed there exist certain invariant projections, which behave well with respect to the spectral measure. We show a relation between the spectrality of operators (as defined by Dunford), and the angles between the Haagerup-Schultz projections. We then use this to show that a broad class of operators are not spectral, including Voiculescu's circular operator. This is joint work with Ken Dykema. (Received September 17, 2019)