1171-13-156 Jasim Ismaeel* (jmid9p@umsystem.edu). Paulsen's Problem for Matrix Frames via Quiver Representations.

The Paulsen's problem in frame theory asks for an upper bound on the distance between two types of Parseval frames. In this talk, we generalize the Paulsen's problem to frames of matrices. To do that, we begin by viewing matrix frames as representations of quivers. Then, using quiver invariant theory, we generalize Barthe's Radial Isotropy theorem to matrix frames. With these tools in hand, the generalization will be established. This is based on joint work with Calin Chindris. (Received August 10, 2021)