## 1125-47-2408 Jaedeok Kim\* (jkim@jsu.edu) and Youngmi Kim (ykim@jsu.edu). Numerical Range of Partial Isometries.

Let S be a partial isometry on a Hibert space  $\mathcal{H}$  with the initial space N and the final space M. A classification can be made for partial isometries into a few different types in terms of the geometric position of two subspaces M and N. The numerical range of partial isometry  $S, W(S) = \{\langle S\xi, \xi \rangle : \xi \in \mathcal{H}, \|\xi\| = 1\}$ , will be described based on the classification of partial isometries. (Received September 20, 2016)