1147-47-559   **Kouhei Izuchi*** (`izuchi@yamaguchi-u.ac.jp`), Yamaguchi, Japan. *Measure zero Rudin type invariant subspaces and ranks of fringe operators.*

Let M be an invariant subspace in the Hardy space over the bidisk with variables z and w. The compression of the multiplication operator T_z onto $M \ominus wM$ is called the fringe operator of M. A lot of information of M is encoded in the properties of the fringe operator. Generally it is difficult to describe the space $M \ominus wM$. In this talk, we introduce measure zero Rudin type invariant subspaces $\mathcal{M}$. In this case, we describe $\mathcal{M} \ominus w\mathcal{M}$ completely. We will show the rank of $\mathcal{M} \ominus w\mathcal{M}$ for the fringe operator and its adjoint operator. (Received January 26, 2019)