1067-47-324 S Mukherjee* (smukherj@uwyo.edu), 3322 Joanna Brunner Drive, APT. A14, Laramie, WY 82072, and F Jafari and J E McInroy. On characterization of range spaces of composition operator on spaces of entire functions.

The celebrated Paley-Wiener theorem naturally identifies the spaces of bandlimited functions with subspaces of entire functions of exponential type. Recently, it has been shown that these spaces remain invariant only under composition with affine maps. In this paper we characterize the subspaces of $L^2(\mathbb{R})$ generated by the action of composition operators on spaces of bandlimited functions. Extensions of these theorems to deBranges-Rovnyak spaces are also given. (Received August 22, 2010)