

1142-47-125

Sivaram K Narayan* (sivaram.narayan@cmich.edu), Department of Mathematics, Pearce Hall 218, Central Michigan University, Mount Pleasant, MI 48859. *Complex Symmetric Composition Operators on Weighted Hardy Spaces.*

A bounded operator T on a complex Hilbert space \mathcal{H} is called complex symmetric if $T = CT^*C$, where C is a conjugation (an isometric, antilinear involution of \mathcal{H}). We consider the complex symmetry of composition operator $C_\varphi f = f \circ \varphi$ induced on the weighted Hardy spaces $H^2(\beta)$ by holomorphic self-maps φ of the open unit disk \mathbb{D} . In this talk, we present necessary conditions for C_φ to be complex symmetric on $H^2(\beta)$. Also, we give a characterization of non-automorphic linear fractional symbols φ such that C_φ is complex symmetric on weighted Bergman spaces $A_\alpha^2(\mathbb{D})$. This is a joint work with Daniel Sievewright and Maria Tjani. (Received August 31, 2018)