

1072-47-41

Gelu F Popescu* (gelu.popescu@utsa.edu). *Composition operators on noncommutative Hardy spaces.*

We initiate the study of composition operators on the noncommutative Hardy space $H_{\mathbf{ball}}^2$. Several classical results about composition operators (boundedness, norm estimates, spectral properties, compactness, similarity) have free analogues in our noncommutative multivariable setting. The most prominent feature of this talk is the interaction between the noncommutative analytic function theory in the unit ball of $B(\mathcal{H})^n$, the operator algebras generated by the left creation operators on the full Fock space with n generators, and the classical complex function theory in the unit ball of \mathbb{C}^n . (Received June 09, 2011)