

1106-VK-926

Soumyadip Acharyya* (sacharyya@crimson.ua.edu) and **Zhijian Wu** (zhijian.wu@xjtlu.edu.cn). *Difference of Two Composition Operators from a Weighted Bergman Space A_α^p to $L^q(\mu)$ when $0 < p \leq q < \infty$.* Preliminary report.

Let φ be an analytic self-map of the open unit disc \mathbb{D} . The operator $C_\varphi : H(\mathbb{D}) \rightarrow H(\mathbb{D})$ defined by $C_\varphi(f) = f \circ \varphi \forall f \in H(\mathbb{D})$ is called the Composition Operator with symbol φ . For each $p > 0$ and $\alpha > -1$, the Weighted Bergman Space A_α^p consists of all analytic functions in $L^p(\mathbb{D}, dA_\alpha)$.

We study the difference of two Composition Operators $C_\varphi - C_\psi$ between spaces of analytic functions. A characterization of Boundedness and Compactness (along with an equivalent expression for the essential norm) of $C_\varphi - C_\psi$ from A_α^p to L_β^q , where $0 < p \leq q < \infty$ is established by Erno Saukko in 2011. In this talk, we derive the analogous results for $C_\varphi - C_\psi$ acting from A_α^p to $L^q(\mu)$ where μ is any positive Borel measure on \mathbb{D} . (Received September 10, 2014)