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Waleed K. Al-Rawashdeh* (walrawashdeh@mttech.edu), Montana Tech, Department of Mathematical Sciences, Butte, MT 59701. *Weighted Composition Operators between Weighted Bergman and S^p Spaces.*

Let φ be an analytic self-map of open unit disk \mathbb{D} and ψ is analytic on \mathbb{D} . The weighted composition operator induced by φ with weight ψ is given by $(W_{\psi, \varphi} f)(z) = \psi(z)f(\varphi(z))$, for z in \mathbb{D} and f analytic on \mathbb{D} . For each $p \geq 1$, let S^p be the space of analytic functions on \mathbb{D} whose derivatives belong to the Hardy space H^p . For $\alpha > -1$ and $p > 0$ the weighted Bergman space A_α^p consists of all analytic functions in $L^p(\mathbb{D}, dA_\alpha)$, where $dA_\alpha(z) = \frac{(1+\alpha)}{\pi} (1 - |z|^2)^\alpha dA(z)$ is the normalized weighted area measure. In this talk, we characterize boundedness and compactness of weighted composition operators act between weighted Bergman A_α^p and S^q spaces for $1 \leq p, q \leq \infty$. (Received September 16, 2013)