1056-47-1417 **Waleed Khaled Al-Rawashdeh*** (wrawashdeh@yahoo.com), 1601 S. Washington Court Apartment # K-7, Mount Pleasant, MI 48858. *Weighted Composition Operators on Bergman Spaces in the Unit Ball.*

Let φ be an analytic self-map of the unit ball $\mathbb{B}_n$ in $\mathbb{C}^n$ and let ψ be an analytic function on $\mathbb{B}_n$. For $\alpha > -1$ and $p > 0$ the weighted Bergman space $A^p_\alpha(\mathbb{B}_n)$ consists of holomorphic functions f in $L^p(\mathbb{B}_n, dv_\alpha)$, that is,

$$A^p_\alpha = L^p(\mathbb{B}_n, dv_\alpha) \cap H(\mathbb{B}_n),$$

where $H(\mathbb{B}_n)$ denote the space of all holomorphic functions on $\mathbb{B}_n$, dv_α is the weighted Lebesgue measure given by

$$dv_\alpha(z) = (1 - |z|^2)^\alpha dv(z),$$

where dv is the volume measure on $\mathbb{B}_n$.

We characterize the boundedness and compactness of the weighted composition operator $W_{\psi,\varphi} : f \mapsto \psi(f \circ \phi)$ from A^p_α into A^q_β, where $0 < p \le q < \infty$ and $-1 \le \alpha, \beta < \infty$, in terms of Carleson-type measures. The results use a certain integral transform that generalizes Berezin transform. (Received September 21, 2009)