GENERALIZED COMPOSITION OPERATOR FROM BLOCH–TYPE SPACES TO MIXED–NORM SPACE ON THE UNIT BALL

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Abstract. Let $H(\mathbb{B})$ be the space of all holomorphic functions on the unit ball $\mathbb{B}$ in $\mathbb{C}^N$, and $S(\mathbb{B})$ the collection of all holomorphic self-maps of $\mathbb{B}$. Let $\varphi \in S(\mathbb{B})$ and $g \in H(\mathbb{B})$ with $g(0) = 0$, the generalized composition operator is defined by

$$C_\varphi^g(f)(z) = \int_0^1 \Re f(\varphi(tz))g(tz)\frac{dt}{t},$$

Here, we characterize the boundedness and compactness of the generalized composition operator acting from Bloch-type spaces $\mathscr{B}_\omega$ and $\mathscr{B}_{\omega,0}$ to mixed-norm space $H(p,q,\phi)$ on the unit ball $\mathbb{B}$.

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