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INTEGRATION TYPE OPERATORS BETWEEN WEIGHTED BERGMAN AND BLOCH TYPE SPACES

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Abstract

In this paper, we consider the integration-type operator

$$I_{g,\varphi}^{(n)} f(z) = \int_0^z f^{(n)}(\varphi(\zeta)) g'(\varphi(\zeta)) \varphi'(\zeta) d\zeta$$

induced by holomorphic maps g and φ of the open unit disk $\mathbb{D}$ where $\varphi(\mathbb{D}) \subset \mathbb{D}$ and n is a non-negative integer. We characterize boundedness and compactness of $I_{g,\varphi}^{(n)}$ between weighted Bergman spaces and Bloch type spaces.

Key Words and Phrases : *Integration-type operator, Composition operator, Weighted Bergman space, Bloch space.*

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