

GENERALIZED WEIGHTED COMPOSITION OPERATORS FROM WEIGHTED BERGMAN SPACES TO BLOCH-TYPE SPACES

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ABSTRACT. Let φ and u be analytic maps on the open unit disc \mathbb{D} such that $\varphi(\mathbb{D}) \subset \mathbb{D}$ and $H(\mathbb{D})$ be the spaces of analytic functions on \mathbb{D} . For a non-negative integer n , the generalized weighted composition operator $D_{\varphi,u}^n$ is defined by

$$D_{\varphi,u}^n f = u \cdot (f^{(n)} \circ \varphi), \quad f \in H(\mathbb{D}).$$

In this paper, we characterize the boundedness and compactness of the generalized weighted composition operator $D_{\varphi,u}^n$ from the weighted Bergman spaces to Bloch-type and little Bloch-type spaces.

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Received: April 06, 2020. Revised: July 25, 2020.

2010 Mathematics Subject Classification: 47B33, 30H20, 30H30.

Key words and phrases: Generalized weighted composition operator, weighted Bergman space, Bloch-type space.

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