COMPOSITION OPERATORS ACTING BETWEEN SOME WEIGHTED MÖBIUS INVARIANT SPACES

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ABSTRACT. In this paper we investigate conditions under which a holomorphic self-map of the unit disk induces a composition operator C_ϕ with closed range on the weighted Bloch space $\mathcal{B}_{\log}$. Also, we introduce a new class of functions the so called $F_{\log}(p,q,s)$ spaces. Necessary and sufficient conditions are given for a composition operator C_ϕ to be bounded and compact from $\mathcal{B}_{\log}$ to $F_{\log}(p,q,s)$. Moreover, necessary and sufficient conditions for C_ϕ from the Dirichlet space $\mathcal{D}$ to the spaces $F_{\log}(p,q,s)$ to be compact are given in terms of the map ϕ..

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