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New estimates of essential norms of weighted composition operators between Bloch type spaces

For $\alpha > 0$, the α -Bloch space is the space of all analytic functions f on the unit disk D satisfying

$$\|f\|_{B^\alpha} = \sup_{z \in D} |f'(z)|(1 - |z|^2)^\alpha < \infty.$$

Let φ be an analytic self-map of D and u be an analytic function on D . The weighted composition operator induced by u and φ is defined by $uC_\varphi(f)(z) = u(z)f(\varphi(z))$. We give estimates of the essential norms of uC_φ between different α -Bloch spaces in terms of the n -th power of φ . We also give similar characterizations for boundedness and compactness of uC_φ between different α -Bloch spaces. This is a joint work with Jasbir Singh Manhas.