

Critically cyclic functions on the unit ball

Pouriya Torkinejad Ziarati (Toulouse)

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In this work, we construct examples of holomorphic functions in $D_2(\mathbb{B}_2)$, the Dirichlet space on \mathbb{B}_2 , for which there exists an index such that the function is cyclic in $D_\alpha(\mathbb{B}_2)$ if and only if. To this end, we use the notion of *interpolation sets* in smooth ball algebras, as studied by Bruna, Ortega, Chaumat, and Chollet.