

Universal composition operators on a polydisc or a ball

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ABSTRACT

Let G the N -dimensional unit polydisk or the N -dimensional unit ball. We characterize the universality of a sequence of composition operators generated by automorphisms of G and a partial derivative operator. Specifically, related results are shown for the Hardy spaces of G . Our theorems improve or extend earlier ones due to Bourdon and Shapiro, Herzog, Bernal, Bonilla and the author, among others.

Keywords: *Hardy spaces, N -dimensional polydisc, N -dimensional unit ball, composition operator, properly discontinuous action, universal function*

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