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Jerry R. Muir, Jr.*, Department of Mathematics, The University of Scranton, Scranton, PA 18510. *Hardy-type spaces arising from a vector-valued Cauchy kernel.*

An integral formula of Cauchy type was recently developed that reproduces any \mathbb{C}^n -valued holomorphic mapping of the open unit ball of \mathbb{C}^n that extends continuously to the boundary using a fixed vector-valued kernel and a scalar transform of the boundary values of the function. We consider Hardy-type spaces associated with this vector-valued kernel. In particular, we introduce and study spaces of vector-valued holomorphic mappings properly containing the vector-valued Hardy spaces that are reproduced through the process described above and isomorphic spaces of scalar-valued non-holomorphic functions that satisfy many of the familiar properties of Hardy space functions. (Received September 26, 2017)