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Daniel Aron Alpay* (alpay@chapman.edu), Schmid College of Science and Technology,
Chapman University, One University Drive, Orange, CA 92866. *Reproducing kernel spaces in
hypercomplex analysis: quaternions, split quaternions and beyond.*

Reproducing kernel Hilbert spaces of analytic functions in one and several complex variables play an important role in analysis and operator theory. The Bargmann-Fock-Segal space and the Drury-Arveson space are two important instances of such spaces. We will discuss the counterpart of these spaces in hypercomplex analysis. We discuss in particular the slice-hyperholomorphic setting, the case of Fueter series and the case of split quaternions. (Received September 09, 2020)