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John A. Emanuello* (jemanuel@math.fsu.edu), FSU Department of Mathematics, 208 Love Building, 1017 Academic Way, Tallahassee, FL 32306-4510, and **Craig A. Nolder**. *The Conformal Groups of The Quaternions and Split-Quaternions*.

We examine the quaternions and split-quaternions as higher dimensional analogues of the complex plane. In a natural way, these may be realized as the semi-Riemannian manifolds $\mathbb{R}^{4,0}$ and $\mathbb{R}^{2,2}$. This allows for a conformal geometry to be defined. We study the conformal groups and show that they may be realized as 2×2 matrices with entries in the corresponding algebra. (Received September 15, 2014)