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Henry Segerman* (segerman@math.okstate.edu). *Navigating the three-sphere via quaternions.*

Hypernom is a virtual reality, phone or tablet game, in which the player navigates the three-sphere by changing the orientation of the device they are playing on. The orientation of the device is interpreted as a unit quaternion, which acts on the three-sphere by quaternion multiplication. This navigation scheme is surprisingly comprehensible for players. I will discuss the qualitative behaviour of this control scheme, and the mathematical explanation for this behaviour. (Received July 11, 2016)