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Marshall A. Whittlesey* (mwhittle@csusm.edu), Department of Mathematics, California State University San Marcos, 333 S. Twin Oaks Valley Road, San Marcos, CA 92096. *Using quaternions to prove theorems in spherical geometry.*

We show how to use quaternions to prove theorems in spherical geometry. In doing so we feature the parametrization of rotations in real three-dimensional space with quaternions. This technique is featured in the speaker's recent book "Spherical Geometry and its Applications," with CRC Press. (Received August 30, 2020)