

1145-51-232

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

The quaternions have long been known to be useful for describing rotations and reflections in 3 dimensional Euclidean space. We show how to use the quaternions as a tool to prove theorems in spherical geometry. (Received August 23, 2018)