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Scott Zimmerman* (zimmerman.416@osu.edu), OH. *What is the Heisenberg group?*

The sub-Riemannian Heisenberg group can be viewed as three dimensional Euclidean space in which the directions one may travel have been restricted. I will give an introduction to this mathematical object which will be accessible to undergraduate mathematics students. In particular, I will present some interesting phenomena which sets the Heisenberg group apart from Euclidean space such as the shape of geodesics in the group. (Received August 09, 2021)