1135-F1-880 **Vi Hart**, **Andrea Hawksley**, **Elisabetta Matsumoto** and **Henry Segerman***
(segerman@math.okstate.edu). *Non-euclidean virtual reality.*

Non-euclidean spaces are often thought of as unintuitive and exotic, but with direct immersive experiences we can get a better intuitive feel for them. The latest wave of virtual reality hardware, in particular the HTC Vive, tracks both the orientation and the position of the headset within a room-sized volume, allowing for such an experience. We use this technology to explore two of the three-dimensional geometries of the Thurston/Perelman geometrization theorem: $\mathbb{H}^3$ and $\mathbb{H}^2 \times \mathbb{E}$. (Received September 16, 2017)