1167-57-14 Benjamin Linowitz* (benjamin.linowitz@oberlin.edu), Oberlin, OH. Systoles of arithmetic locally symmetric spaces.

The systole of a compact Riemannian manifold M is the least length of a non-contractible closed geodesic on M. In this talk we will survey what is known about the systoles of hyperbolic 2- and 3-manifolds, paying particular attention to the arithmetic setting. We will conclude by discussing generalizations of these results to arithmetic locally symmetric manifolds. (Received January 18, 2021)