1163-51-1314 **Rebekah Palmer*** (rebekah.palmer@temple.edu) and **Khanh Le** (khanh.q.le@temple.edu).

Totally geodesic surfaces in twist knot complements II.

The study of surfaces has been essential in studying the geometry and topology of the 3-manifolds that contain them. In particular, there has been considerable work in understanding the existence of totally geodesic surfaces in hyperbolic 3-manifolds. Most recently, Bader, Fisher, Miller, and Stover showed that having infinitely many maximal totally geodesic surfaces implies that the 3-manifold is arithmetic. In this talk, we will conversely present examples of infinitely many non-commensurable (non-arithmetic) hyperbolic 3-manifolds that contain a unique totally geodesic surface and then extend that result to 3-manifolds that contain exactly k totally geodesic surfaces via covering space techniques. This is joint work with Khanh Le. (Received September 15, 2020)