Jane Wang* (wangjan@iu.edu) and Sunrose Shrestha. Statistics of Square-Tiled Surfaces. Square-tiled surfaces are a class of translation surfaces that are of particular interest in geometry and dynamics because, as covers of the square torus, they share some of its simplicity and structure. One nice way to think about square-tiled surfaces is as surfaces created by gluing together unit squares along their edges. In this talk, we'll discuss various properties that square-tiled surfaces can have that give them extra symmetry. After drawing insights from experimental evidence, we will consider the implications between these properties and their frequency in each stratum of translation surfaces. (Received August 18, 2020)