1154-54-2717 **Nicholas Cazet** (nccazet@ucdavis.edu) and **Jane Park*** (jane.park@sjsu.edu). *Minimal Lattice Tiled Torus Surfaces Embedding Lattice Tiled Torus Knots.* Preliminary report.

Lattice tiled surfaces(or just "tiled" surfaces) exist as connected subsets of $(\mathbb{Z} \times \mathbb{R}^2) \cup (\mathbb{R} \times \mathbb{Z} \times \mathbb{R}) \cup (\mathbb{R} \times \mathbb{Z}^2) \subset \mathbb{R}^3$ which edges lie in $(\mathbb{Z}^2 \times \mathbb{R}) \cup (\mathbb{Z} \times \mathbb{R} \times \mathbb{Z}) \cup (\mathbb{R} \times \mathbb{Z}^2)$. Unlike conventional surfaces, and thus conventional knots, sitting in $\mathbb{R}^3$, tiled surfaces have combinatorial consequences, and concepts of minimal surface area. In our talk, we will discuss the minimal tile tori for a few small tile (p, q)-torus knots. (Received September 17, 2019)