1023-52-260 Casey Mann\* (cmann@uttyler.edu), 3900 University Blvd, Tyler, TX 75799, and Benjamin McCarty, Jennifer McLoud-Mann, Ramona Ranalli and Nathan Smith. Minimal Knotting Numbers.

This talk will concern the minimal knotting number for several types of lattices, including the face-centered, body-centered, and simple-hexagonal lattices. We will present our results, which were found through the use of a computer algorithm, that the minimal knotting number in the simple hexagonal lattice is 20, in the face-centered cubic lattice is 15, and in the body-centered cubic lattice is 13. (Received August 31, 2006)