1139-28-227 **Jeremy T Tyson***, Department of Mathematics, 1409 West Green St, Urbana, IL 61801.

Geometric measure theory in the Heisenberg group.

I will survey some recent results in geometric measure theory in the sub-Riemannian Heisenberg group, including Marstrand-type projection theorems and preliminary work related to Falconer's distance set problem. This talk is based on prior work with Zoltan Balogh, Estibalitz Durand Cartagena, Katrin Faessler and Pertti Mattila, and ongoing work with Fernando Roman Garcia. (Received February 12, 2018)