1163-30-535   **Andrea Pinamonti**, **Gareth Speight** and **Scott Zimmerman*** (`zimmerman.416@osu.edu`).
Whitney extensions for curves in the Heisenberg group.

Sub-Riemannian manifolds are mathematical models of settings in which motion is restricted. The simplest non-trivial example of a sub-Riemannian manifold is the Heisenberg group.

I will discuss a version of Whitney's classical extension theorem for smooth, admissible curves in this setting. Whitney provided necessary and sufficient conditions under which a real valued function defined on a compact subset of Euclidean space may be extended to a smooth function defined everywhere. I will provide similar conditions for the extension of smooth curves in the Heisenberg group. (Received September 08, 2020)