

1135-VM-1002 **Jacob R Mirra*** (jrm152@pitt.edu), 5533 Fifth Ave, Apt #10, Pittsburgh, PA 15232.

Developments in the Heisenberg Group. Preliminary report.

The Heisenberg Group is the simplest non-trivial example of a sub-Riemannian manifold. This talk will briefly motivate a conjecture of Gromov and discuss some weaker results we've been able to prove using the Jacobian structure of Hölder continuous maps, as well as some numerical evidence for the existence of a Hölder continuous contraction of \mathbb{S}^1 in the Heisenberg Group which Gromov did not expect to exist. (Received September 18, 2017)