1163-35-76 **Liangbing Luo***, 341 Mansfield Rd, Storrs, CT 06269. *Logarithmic Sobolev Inequalities on Non-isotropic Heisenberg Groups.*

A Heisenberg group is the simplest non-trivial example of a sub-Riemannian manifold. In this talk, we will discuss the dimension (in)dependence of the constants in logarithmic Sobolev inequalities on non-isotropic Heisenberg groups. In this setting, a natural Laplacian is not an elliptic but a hypoelliptic operator. The argument relies on viewing the logarithmic Sobolev inequality as a limiting case of Sobolev inequalities and tensorization of the logarithmic Sobolev inequalities. (Received August 09, 2020)