Jesse S F Levitt\*, USC Dornsife, Department of Mathematics, 3620 S. Vermont Ave., KAP 104, Los Angeles, CA 90005. Co-nilpotent Connected Hopf Algebra Actions.

I will present progress towards calculating Hopf algebra actions over several classes of quantum groups when the Hopf algebra is co-nilpotent and connected. This is part of a larger effort to develop software that will calculate and classify Hopf actions in low dimensional cases. We will demonstrate the software with several worked examples. (Received January 29, 2019)