Geometry, Groups and Dynamics/GEAR Seminar
(held at the Illinois hub of GEAR)

12:00 pm, Thursday, September 28, 2017, 243 Altgeld Hal
Mark Pengitore (Purdue University)
Effective Twisted Conjugacy Separability of Nilpotent Groups
There has been a recent interest in providing effective proofs of separability properties such as residual finiteness and conjugacy separability. Unlike residual finiteness, conjugacy separability does not respect finite extensions. Thus, we introduce twisted conjugacy separability, originally defined by Fel'shtyn, in order to study effective conjugacy separability of finite extensions of conjugacy separable groups. In joint work with Jonas Dere, we provide an effective proof of twisted conjugacy separability of finitely generated nilpotent groups. That, in turn, provides an effective bound for conjugacy separability of all finite extensions of a fixed nilpotent group in terms of the asymptotic behavior of conjugacy separability of the base nilpotent group.