1127-03-371 Matthew Harrison-Trainor* (matthew.h-t@berkeley.edu) and Meng-Che "Turbo" Ho. Optimal Scott sentences of finitely generated groups.

Every finitely generated structure has a Σ_3^0 Scott sentence. However most finitely generated groups have a simpler d- Σ_2^0 Scott sentence. I will talk about joint work with Meng-Che "Turbo" Ho where we constructed a finitely generated group whose optimal Scott sentence is Σ_3^0 . Part of this work is a general characterization of the finitely generated structures with d- Σ_2^0 Scott sentences. (Received February 07, 2017)