

**Speaker:** Francis Adams

**Title:** Effective Categoricity of Ultrahomogeneous Structures

**Abstract:** A countable structure is ultrahomogeneous if every isomorphism of finitely generated substructures extends to an automorphism of the entire structure. The canonical example of such a structure is the rational numbers with their ordering. In joint work with Doug Cenzer, we consider the problem of finding the effective complexity of isomorphisms between ultrahomogeneous structures. I will define a weakening of being ultrahomogeneous and show that all such computable structures are  $\Delta_2^0$  categorical. I will also determine which structures satisfy this weaker property for specific classes of structures like linear orders and trees.