Speaker: Ralph Howard (USC)

Title: Quasi-isometries, Groups, and Manifolds

Abstract: The notion of a quasi-isometry between metric spaces will be defined. One example where quasi-isometries occur naturally is on finitely presented groups. Any choice of generators for the group makes it into a metric space via the word metric. Different choices of generators give different metrics, but any two such metrics are quasi-isometric. We will also outline a proof of a result of Gromov that the universal cover of a compact manifold is quasi-isometric to the fundamental group of the manifold.