

Large-scale Geometry of Groups

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Large-scale geometry, or coarse geometry, has provided useful tools for understanding manifolds and groups. In this talk I will discuss certain large-scale notions of dimension, namely, asymptotic dimension (introduced by Gromov) and decomposition complexity (introduced by Guentner, Tessera and Yu). The basic properties of these notions will be presented, along with several examples and open problems along the way, and I will discuss joint work in progress with Andrew Nicas on decomposition complexity.