TULLIA DYMARZ, University of Wisconsin, Madison

Nonrectifiable Delone sets in amenable groups

In 1998 Burago-Kleiner and McMullen constructed the first examples of coarsely dense and uniformly discrete subsets of \mathbb{R}^n that are not biLipschitz equivalent to the standard lattice \mathbb{Z}^n for $n \geq 2$. We will show how to find such sets inside certain other solvable Lie groups. The techniques involve combining ideas from Burago-Kleiner with quasi-isometric rigidity results from geometric group theory.