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Irine Peng* (ipeng@indiana.edu). *Assouad-Nagata dimension of Lie groups.*

The Assouad-Nagata dimension was introduced by Assouad inspired from the ideas of Nagata. Metric spaces of finite Assouad-Nagata dimension satisfy interesting geometric properties. For example they admit quasisymmetric embeddings into the product of finitely many trees and have nice Lipschitz extension properties. Here we prove that the Assouad-Nagata dimension of a connected Lie group G (with finitely many components) equipped with a left-invariant Riemannian metric coincides with the topological dimension of G/C where C is a maximal compact subgroup. (Received August 26, 2010)