Séminaire d'algèbre, topologie et géométrie
Jeudi 19 janvier à 14h
Salle de conférences

Francesco Matucci

Milano

Embeddings into Finitely Presented Simple Groups

In 1973, William Boone and Graham Higman proved that a finitely generated group G has a solvable word problem if and only if G can be embedded into a simple subgroup of a finitely presented group. They conjectured a stronger result, namely that every such group G embeds into a finitely presented simple group. This conjecture remains open after almost 50 years, but recent advances in the study of finitely presented simple groups have made it possible to verify the Boone-Higman conjecture for several large classes of groups. In this talk, I will survey results on Boone-Higman embeddings of right-angled Artin groups, countable abelian groups, contracting self-similar groups, and hyperbolic groups. This talk includes joint work with Jim Belk, Collin Bleak, James Hyde, and Matthew Zaremsky.