

Lattices in locally compact groups – rare and precious

Ever since the work of Margulis and Mostow in the 1970s remarkable group-theoretic properties of a group Γ that sits as a lattice in a Lie-, p-adic or locally compact group G have been proved by a passage to G - that are otherwise unattainable. So being a lattice is a precious property of groups. However, being a lattice is also quite rare, and the locally compact lattice envelope G that provides the useful extra symmetries is often unique. We give specific instances of this phenomenon.

This is based on joint work with Alex Furman and Uri Bader.