

1108-22-507 **Alex Furman*** (furman@uic.edu), Mathematics, Statistics, and Computer Science, (m/c 249),
851 S. Morgan Str, Chicago, IL 60607. *Rigidity for groups with hidden symmetries.*

In the 1970s G.A.Margulis proved that linear representations of certain discrete subgroups (lattices) in such Lie groups as $SL(3, \mathbb{R})$ are essentially determined by the representations of the ambient Lie group. This phenomenon, known as superrigidity, has far reaching applications and has inspired a lot of research in such areas as geometry, dynamics, descriptive set theory, operator algebras etc.

We shall try to explain the superrigidity of lattices and related groups by looking at some hidden symmetries (Weyl group) that they inherit from the ambient group.

The talk is based on a joint work with Uri Bader. (Received January 20, 2015)