Twisted conjugation in groups

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Abstract

Twisted conjugation emerges in a variety of contexts throughout maths, e.g. topology, functional analysis and theoretical computer science. Specifically in group theory, the study of Reidemeister numbers (which count twisted conjugacy classes) was initiated nearly a century ago and became a very active area over the past three decades. See e.g. [1, 3] for background.

In the first part of the talk we will give a 'crash course' on twisted conjugation for groups in general. In the second part we concentrate on recent developments regarding Reidemeister numbers of arithmetic groups, with particular focus on the (still mysterious) relationship between the so-called property R_∞ and the structure of our groups of interest [2, 4].

References

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[2] T. Mubeena and P. Sankaran, Twisted conjugacy classes in lattices in semisimple Lie groups, *Transform. Groups* **19**, (2014), 159–169.

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