

## **Residually amenable groups: stability properties**

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Abstract: Residually amenable groups are a common generalization of residually finite and of amenable groups, and are particular examples in the larger class of sofic groups. They satisfy the Kaplansky Stable Finiteness Conjecture, the Determinant Conjecture and few other famous conjectures that are still open in the general setting.

The talk will begin with a short overview concerning the above problems. In the main part I will present results on the stability of residual amenability under free products and certain HNN-extensions. I will sketch the proofs and provide several examples.

In the introductory talk “Residual properties and amenable groups” I will introduce the concept of residual properties, with particular emphasis on root properties in the sense of Gruenberg. I will discuss stability properties for the class of discrete amenable groups.