

Mathematics

## Inn'formal Probability Seminar

## Tattwamasi Amrutam (Ben Gurion University of the Negev)

"Invariant Random Algebras associated with a group".

## Abstract:

Let  $\Gamma$  be a discrete group. We can associate with it a von Neumann algebra (a WOT-topology closed algebra inside B(H)), called the group von Neumann algebra  $L(\Gamma)$ . We consider Subalg( $L(\Gamma)$ ), the collection of all von Neumann subalgebras of  $L(\Gamma)$ . This is a measurable set in the Borel-Effros topology. A probability measure on Subalg( $L(\Gamma)$ ) is called an Invariant Random Algebra (IRA). We shall talk about some recent progress on the properties of such IRAs. We shall also discuss situations when an IRA is induced from an IRS on the group.

We will explain all the concepts above. No prior knowledge about the von Neumann algebras or WOT-topology will be assumed. This is an ongoing work with Yair Hartman and Hanna Oppelmayer.

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## Monday, 17. April 2023, 14:15 HSB 6, civil engineer building, ground floor



