Speaker: Stefaan Vaes (K.U. Leuven, Belgium)

Title: *W*-rigidity paradigms for embeddings of II_1 factors*

Abstract: I will report on a joint work with Sorin Popa in which we undertake a systematic study on the following question: when can a given II_1 factor be embedded into another given II_1 factor? More generally, we say that a II_1 factor M stably embeds into a II_1 factor N if M may be realized as a subfactor of an amplification of N, not necessarily of finite index. We provide families of II_1 factors that are mutually non stably embeddable, as well as families that are mutually embeddable, yet nonisomorphic. We prove that the preorder relation of stable embeddability is as complicated as it can be since it contains any partially ordered set. We also obtain numerous computations of invariants of II_1 factors, including descriptions of all stable self embeddings, outer automorphism groups, etc.

(Based on https://arxiv.org/abs/2102.01664)