

Stefaan Vaes

W*-superrigidity for group measure space II_1 factors

I will explain a joint work with Sorin Popa in which we prove a unique crossed product decomposition result for group measure space II_1 factors arising from arbitrary free ergodic probability measure preserving actions of any group Γ in a fairly large family \mathcal{G} . This family \mathcal{G} contains all free products of a Kazhdan group and a non-trivial group, as well as certain amalgamated free products over amenable subgroups. The latter allow us to give examples of W*-superrigid group actions, i.e. group actions for which the associated II_1 factor entirely remembers the group and the action that it was constructed from.