Titre : Integrable measure equivalence rigidity of right-angled Artin groups via quasi-isometry

Résumé : Let Gamma be a finite simplicial graph, and let G be the right-angled Artin group over Gamma: it has one generator per vertex of Gamma, and two generators commute if the corresponding vertices are adjacent. The group G is always measure equivalent to any graph product of countably infinite amenable groups over Gamma, and describing the class of all groups that are measure equivalent to G is a challenging problem in general. However we understand the situation much better when considering integrable measure equivalence: this is a notion which has received a lot of attention recently and carries more geometric information about the group than mere measure equivalence. Under the assumption that Out(G) is finite, we prove the following theorem. If a torsion-free countable group H is measure equivalent to G, in such a way that the word length of a measure equivalence cocycle from H to G is integrable, then H is finitely generated and quasi-isometric to G. Combining this theorem with Huang's work on quasi-isometric rigidity of right-angled Artin groups, we obtain a superrigidity theorem in integrable measure equivalence for a class of right-angled Artin groups. This is joint work with Jingyin Huang.