Abstract:
The full group of a probability measure preserving action (of a group) is the group of the measure preserving transformations of the space whose graph is contained in the orbit equivalence relation of the action. For countable groups, these full groups were defined by Dye in ’59. He showed that such groups admit a Polish topology and are complete invariant of orbit equivalence. In a joint work with F. Le Matre, we extend the notion of full group to probability measure preserving actions of locally compact second countable groups. These full groups also have a Polish topology and they are also complete invariants of orbit equivalence. In this talk, I will define full groups and their topology and I will discuss about some of their topological properties, such as the topological rank.