

**Speaker:** Christian Rosendal

**Title:** Coarse equivalence, topological couplings and a theorem of Gromov.

**Abstract:** A seminal theorem of M. Gromov states that two finitely generated groups are quasi-isometric if and only if they admit a topological coupling, thus establishing a link between the geometry and topological dynamics of groups. Much work has been done recently on expanding the tools and results of geometric group theory to locally compact groups and beyond and we shall explain how Gromov's theorem admits generalisations to all locally compact groups and even a special class of non-locally compact topological transformation groups. (The initial part of the talk will be based on joint work with U. Bader.)