

# L<sup>2</sup>-INVARIANTS seminar

## JONES REPRESENTATIONS OF THOMPSON GROUPS

**VENUE:** Sala Naranja, ICMAT (Campus de Cantoblanco, Madrid)

**DATE:** Thursday 19 April 2018 - 15:00 h

**SPEAKER:** Arnaud Brothier (University of Rome Tor Vergata)

**ABSTRACT:** Thompson group  $F$  is the group of homeomorphisms of  $[0; 1]$  that are piecewise linear with slopes equal to a power of 2 and breakpoints a dyadic rational. While being one of the most studied discrete groups, it still remains allusive.

By investigating constructions of conformal field theories, Jones recently discovered a large class of unitary representations of Thompson group  $F$  and other related groups (such as Thompson groups  $T$ ,  $V$ , etc.). Those representations are constructed via a very flexible category/functor method. Many examples are given by Jones planar algebra framework as well as certain couple of operators.

I will describe concrete examples of such representations and present some ongoing research.

This is a joint work with Jones.

**More info:** <https://www.icmat.es/events/seminar/group-theory>  
<https://www.icmat.es/rt/l2invariants2018/index.php>