

CHROMATIC HOMOTOPY, K -THEORY AND FUNCTORS

CIRM, LUMINY, 23-27.01.2023

THURSDAY 11:30 – 12:30, **Christine Vespa** (Aix-Marseille Université):

On the stable cohomology of the automorphism groups of free groups with coefficients.

In this talk, I will give an overview of known results on the stable cohomology of the automorphism groups of free groups with twisted coefficients. After explaining the notion of wheeled PROPs, I will describe a wheeled PROP structure on the stable cohomology of automorphism groups of free groups with some particular coefficients. I will explain how cohomology classes, constructed previously by Kawazumi, can be interpreted using this wheeled PROP structure and I will construct a morphism of wheeled PROPs from a PROP given in terms of functor homology and the wheeled PROP evoked previously.

This is joint work with Nariya Kawazumi.