

The Godbillon-Vey Invariant in KK -theory with Real Coefficients

vendredi 2 décembre 2022 11:30 (1 heure)

The Godbillon-Vey invariant is a 3-degree cohomology class associated with a foliation of codimension 1 of a closed manifold M .

This classical invariant has been shown to be closely related to measure theory and dynamics of the foliation. It also plays a crucial role in index theory, as proved by Alain Connes.

We construct a natural class in bivariant KK -theory with real coefficients representing the Godbillon-Vey invariant. We shall explain these construction, see how the Godbillon-Vey invariant deals with a (densely defined) infinite trace, and the relation to the index theorem for measured foliations.

This is joint work with Paolo Antonini (Unisalento) and Georges Skandalis (Université Paris Cité).

Orateur: Prof. AZZALI, Sarah (Università di Bari)