HENRI MOSCOVICI, The Ohio State University, Columbus, OH 43210 *Hopf algebras and transverse characteristic classes*

Hopf algebras and their Hopf cyclic cohomology emerged as a geometric tool in the work of A. Connes and myself computing the local index theorem for transversely (hypo)elliptic operators on foliations. In this talk I will explain how they allow to express the characteristic classes of a foliation solely in terms of the transverse holonomy data, without resorting to the ambient manifold.

I will then discuss extensions and refinements of these results, obtained in recent joint work with B. Rangipour, which cover all classical types of (infinite primitive Cartan-Lie) holonomy pseudogroups.