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Universal Chern classes in Hopf cyclic cohomology

Cyclic cohomology of algebras is the non commutative counterpart of the de Rham homology of manifolds in differential geometry. We introduce Hopf cyclic cohomology as the geometric part of cyclic cohomology. We focus on the space of leaves of a general foliation and construct universal Chern classes as cyclic cocycles on the associated crossed product algebra.