Abstract

From 1980s, it is an open problem of proposing cohomologic formula for the basic index of a transversally elliptic basic differential operator on a vector bundle over a foliated manifold. In 1990s, El Kacimi-Alaoui has proprosed to use the Molino theory for studying this index. My thesis is a first step in this direction. While the Riemannien foliation is Killing, Goertsches et Töben have remarked that there exists a naturel cohomologic isomorphism. The principal result of my thesis is the geometric realisation of the cohomologic isomorphism by Chern characters under some hypothèses. This talk will be a brief presentation of my thesis.