

Title : Non-commutative Twisted Euler characteristic in Iwasawa theory.

Abstract : It is well known that for a finitely generated torsion module M over the Iwasawa algebra $\mathbb{Z}_p[[\Gamma]] \cong \mathbb{Z}_p[[X]]$, there exists a twist $M \otimes_{\mathbb{Z}_p} \rho$ of M by a continuous p -adic character ρ of Γ such that, the U -Euler characteristic is finite for every open subgroup U of Γ . We prove a generalization of this result by considering modules over the Iwasawa algebra of a general p -adic Lie group G , instead of Γ . This is a joint work with Somnath Jha.