Séminaire de théorie des nombres

Le 27 février à 14h

A dynamical systems analogue of Lichtenbaum's recent conjectures on special values of Hasse-Weil zeta functions

Exposé de Christopher Deninger

Résumé : During the last years, Lichtenbaum has developed conjectures describing the vanishing orders and values of Hasse-Weil zeta functions at integers in terms of "Weil-étale cohomologies". These conjectures are substantially differerent from the Bloch-Kato conjectures and their formalism is simpler. In the lecture we describe a class of dynamical systems for whose Ruelle zeta functions a precise analogue of Lichtenbaum's conjectures can be proven. The main tools are the Cheeger-Mueller theorem on the equality of analytic and combinatorial torsion and certain results in the analysis of foliations.