Séminaire de théorie des nombres

Le 20 novembre 2017 à 14h (Jussieu)

Generalized Multiple Zeta Values over number fields

Exposé de Xiaohua Ai (Max Planck Institute for Mathematics)

Résumé : We will talk about one potential method to generalize classical multiple zeta values (MZVs) to the case when the ground field \mathbb{Q} is replaced by an arbitrary number field. The motivation behind our construction comes from the work of A. Goncharov on Hodge correlators and the plectic principle of J. Nekovář and A. Scholl. The starting point is to generalize the Hecke formula in order to produce suitable "secondary" arithmetic objects. The key construction is the higher plectic Green function. Replacing Eisenstein series in Hecke's formula by our higher plectic Green functions, a similar integration gives new results, namely the generalization of MZVs and multiple polylogarithms.