Yingkun Li (Darmstadt) :

Harmonic Maass forms of weight one and regulators.

Abstract : Harmonic Maass forms are natural generalizations of holomorphic modular forms and Maass cusp forms. In the past decade, this object has played an important role in many discoveries in number theory, from q-series to arithmetic intersection. In this talk, we look at some harmonic Maass forms of weight 1, whose Fourier coefficients are conjectured to be logarithm of algebraic numbers in suitable number fields. We will give both theoretical and numerical evidence towards this conjecture.