CLASSIFICATION OF L-FUNCTIONS OF DEGREE 2 AND CONDUCTOR 1

Alberto Perelli (University of Genova)

Abstract: We give a full description of the functions F of degree 2 and conductor 1 in the general framework of the extended Selberg class. This is performed by means of a new numerical invariant χ_F, which is easily computed from the data of the functional equation. We show that the value of χ_F gives a precise description of F, thus providing, in particular, a sharp form of the classical converse theorems of Hecke and Maass. (Joint work with J. Kaczorowski)

ELAZ 2022
Adam Mickiewicz University, Poznań, Poland
August 22–26, 2022