

Title: “Explicit Form of Zeta Functions of Prehomogeneous Vector Spaces”

Speaker: Hiroshi Saito (Kyoto University, Japan)

The topic of this talk is concerned with explicit expression of zeta functions of irreducible regular reduced prehomogeneous vector spaces. We give a convergence theorem for zeta functions of prehomogeneous vector spaces under a rather general condition, and a formula expressing zeta functions by local orbital integrals. We show some examples of explicit form of zeta functions calculated by this formula. Based on these examples, we discuss two finite groups, which play important role in determining zeta functions, and some observations.