FMSP Lectures

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Structure of rational orbits in prehomogeneous spaces.

July 3 (Thu)　16:00 ～ 18:00　Room 470

Abstract:

A prehomogeneous space is an algebraic representation of a reductive group that has a Zariski open orbit. Classifying orbits over a general field (or even a ring) is a non-trivial problem. A typical example is GL(n) acting on the space of symmetric matrices. In this case the orbits are classified by the isomorphism classes of quadratic spaces. In this lecture I will give a detailed exposition of a case related to a work of Bhargava.