

Sophia University

Mathematics Colloquium

When: Friday, May 20, 2016, 17:30-18:30

Where: Room No. 201, Main Bldg., Ichigaya-Campus

Speaker: Thomas Geisser (Rikkyo University)

Title: Special values of zeta-functions

Abstract: I will explain how counting solutions of polynomial equations naturally leads to the definition of the zeta-function of a variety (generalizing the Riemann zeta-function and Dedekind zeta function).

The values of the zeta-function at integer points often have very deep arithmetic meaning. The best known example is the class number formula for the value at 0 and 1 or the Dedekind zeta-function. We discuss ways how to relate the special values at integers to other invariants of the solution set.