上海数学中心
SHANGHAI CENTER FOR
MATHEMATICAL SCIENCES

SIMIS

ENUMERATIVE GEOMETRY SEMINAR

Speaker: Michel van Garrel
University of Birmingham

Time: Fri. Oct 24th, 14:00 - 16:00
Venue: SIMIS Room 1610

Intrinsic mirrors to log K3 surfaces and modular forms

Abstract: Intrinsic Mirror Symmetry (Gross, Siebert) associates to a log Calabi-Yau variety (Y,D) a geometric generating function with support the tropicalisation of (Y,D), and with invariants the corresponding punctured Gromov-Witten invariants. This construction defines a ring and a mirror family. The enumerative mirror conjecture then states that various period integrals on the mirror family compute various Gromov-Witten invariants of (Y,D), not necessarily punctured. I will describe some log K3 surfaces, where this is realized, and where one obtains some new relations for Gromov-Witten invariants, including via modular forms. Joint work with Siebert and Ruddat.