

June 02 - 05, 2009



Workshop

Mirror Symmetry 2009

Organizers: Daniel Huybrechts (Bonn University, Mathematics) and Albrecht Klemm (Bonn University, Physics)

Location: Mathematisches Institut der Universität Bonn, Endenicher Allee 60, „Sitzungssaal“

Mirror symmetry not only brings together string theory, algebraic geometry, symplectic geometry, homological algebra, automorphic forms and number theory but has also triggered significant progress in all these areas separately. Prominent examples in mathematics are the constructive approach to the SYZ conjecture via tropical geometry, the recent progress on the calculation of Gromov-Witten and Donaldson-Thomas invariants and the construction of important derived categories on Calabi-Yau manifolds. Within the last years wall crossing formulas for symplectic invariants have been related to the theory of automorphic forms. The latter developments have physical applications for the microscopic entropy count of black holes in string theory.

The aim of the workshop is to create an interactive forum for scientists working in the above mentioned fields with a common interest in mirror symmetry in its various manifestations.

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