

ODTU-Bilkent Algebraic Geometry

A panorama of Mirror Symmetry

By

Yankı Lekili (Imperial College London)

Abstract: Mirror symmetry is one of the most striking developments in modern mathematics whose scope extends to very different fields of pure mathematics. It predicts a broad correspondence between two subfields of geometry - symplectic geometry and algebraic geometry. Homological mirror symmetry uses the language of triangulated categories to give a mathematically precise meaning to this correspondence. Since its announcement, by Kontsevich in ICM (1994), it has attracted huge attention and over the years several important cases of it have been established. Despite significant progress, many central problems in the field remain open. After reviewing the general features, I will survey some of my recent results on mirror symmetry (with thanks to collaborators T. Perutz, A. Polishchuk, K. Ueda, D. Treumann).

Date: 16 April 2021, Friday Time: 15:40 Place: Big Blue Button

To request the event link, please send a message to sertoz@bilkent.edu.tr