



THE WEIZMANN INSTITUTE OF SCIENCE
FACULTY OF MATHEMATICS AND COMPUTER SCIENCE

Seminar in Geometry and Topology

Room 155 ,Ziskind Building
on Monday, Nov 25, 2019
at 09:00

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Zariski cancellation problem for surfaces

Abstract:

The Zariski Cancellation Problem asks when a stable isomorphism of affine varieties over an algebraically closed field implies an isomorphism. This is true for affine curves (Abhyankar, Eakin, and Heinzer 72), for the affine plane in zero characteristic (Miyanishi-Sugie and Fujita 79–80), but false for general affine surfaces in zero characteristic (Danielewski 88) and for the affine space A^3 in positive characteristic (N. Gupta 13). The talk is devoted to a recent progress in the surface case over a field of zero characteristic (Bandman-Makar-Limanov, Dubouloz, Flenner and Kaliman, e.a.). It occurs to be possible to describe the moduli space of pairs of surfaces with isomorphic cylinders.