THE UNIVERSITY



OF HONG KONG

Institute of Mathematical Research Department of Mathematics#

GEOMETRY SEMINAR

Contact loci of arcs

Professor Nero Budur

Department of Mathematic Katholieke Universiteit Leuven, Belgium

Date: August 5, 2024 (Monday)

Time: 4:00 - 5:00pm

Venue: Rm 210, Run Run Shaw Bldg., HKU

Abstract

Contact loci are sets of arcs on a variety with prescribed contact order along a fixed subvariety. They appear in motivic integration, where motivic zeta functions are generating series for classes of contact loci in appropriate Grothendieck groups. We give an overview of recent results relating the basic topology of contact loci of hypersurfaces with a Floer theory and with log minimal models.