

Mathematical Colloquia

Monday, 12 March 2018
17:15 h, Lecture Room B 78

Prof. Dr. Andras Nemethi, University of Budapest

The topology of normal surface singularities

Abstract:

A local complex normal surface singularity is characterized by its link, an oriented compact 3-manifold.

I will discuss several properties and invariants of such links.

One of them is the 'lattice cohomology', which leads to certain connections with Heegaard-Floer and Seiberg-Witten invariants.

I will present also some bridges between topological and analytic invariants (Zariski's Conjecture, Durfee's Conjecture, Casson-invariant Conjecture, etc.)