SIMION STOILOW INSTITUTE OF MATHEMATICS OF THE ROMANIAN ACADEMY

Monthly conference:

Lattice cohomology of curve singularities

András Némethi

(*Alfréd Rényi Institute of Mathematics & University of Budapest*)

Tuesday, November 29th 2022, 12.00

IMAR, "Miron Nicolescu" amphitheater

Abstract: For every isolated curve singularity we will define a graded Z[U] module, the lattice cohomology of the curve. Its Euler characteristic is the delta invariant of the curve. In the Gorenstein case we will prove certain symmetry properties.
For plane curve singularities we will connect it with the motivic Poincare series and with the Link Heegaard Floer cohomology of the link in S^3 associated with the local isolated germ.