Berlin Mathematics Research Center MATH+

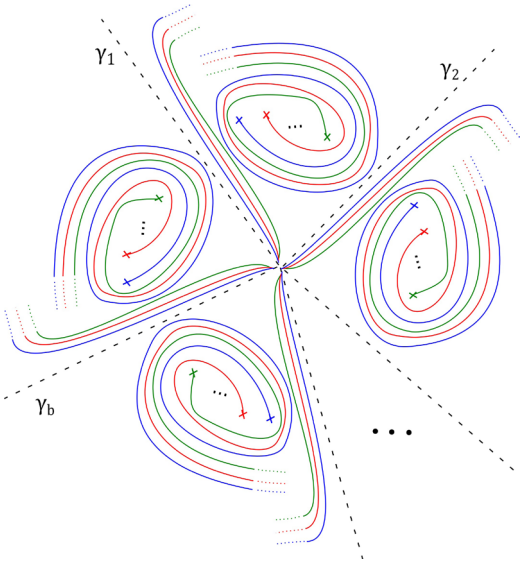
Berlin Mathematical School BMS

MATH+ Friday Colloquium

Friday 15 December 2023 at 14:15

TU Berlin, Physics Building, Room EW 201

Tea & Cookies starting at 13:00!



Ailsa Keating

(U Wien)

The symplectic topology of singularities

Given an isolated complex singularity, any smoothing (i.e. Milnor fibre) of it is naturally a symplectic manifold. This leads to a rich interplay, first suggested by Arnol'd: on the one hand, ideas from singularity theory yield a wealth of interesting symplectic phenomena; and conversely, symplectic topology is a very fertile viewpoint from which to revisit and shed light on classical singularity theory.

This talk will give a biased introduction to this circle of ideas. Special attention will be given to providing explicit examples, with particular focus on two variable examples (i.e. curve singularities). No prior knowledge of symplectic geometry (or singularity theory) will be assumed.

Ailsa Keating works on problems in symplectic geometry and homological mirror symmetry. She received her PhD from the Massachusetts Institute of Technology, under the supervision of Paul Seidel, in 2014. She then held postdoctoral positions at Columbia University and the Institute for Advanced Studies, before joining the mathematics faculty at Cambridge University in 2017. In the summer of 2023, she moved to the University of Vienna.