

Kolloquium über Reine Mathematik

Einladung zu einem Vortrag

Dienstag, 12. Dezember 2017

17 Uhr s.t., Geom H4

Dr. Ailsa Keating (University of Cambridge)

On two-variable singularities, planar graphs and generalised Artin groups

Abstract:

Start with a two-variable complex polynomial f with an isolated critical point at the origin. One can associate to it a smooth Riemann surface with boundary: the Milnor fiber of f, M_f, given by a smoothing of f near the origin. This comes equipped with a distinguished collection of S^1s on M_f, called vanishing cycles.

We explain how an algorithm of A'Campo allows one to encode all of this information in a planar graph. Time allowing, we will explain how to associate a group to this graph, and discuss some of its representations. No prior knowledge of singularity theory will be assumed.

Vor dem Vortrag (ab 16.30 Uhr) stehen im Raum 327 Kaffee und Tee bereit.