

# The Topology of Matrix Singularities

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May 4, 2016

A matrix singularity  $(X, 0) \subset (\mathbb{C}^N, 0)$  is a complex space germ whose ideal  $I$  is generated by minors of a matrix  $M$  with polynomial (resp. analytic) entries.

As in the case of complete intersection singularities deformations of  $(X, 0)$  can easily be described and if  $(X, 0)$  admits a smoothing, one can ask for the topology of the smooth fiber.

In our case this means: Computation of Betti numbers. We use the Tjurina modification to translate from isolated matrix singularities to possibly non-isolated local complete intersection schemes. I will report on work in progress and intermediate results.