

Open problems about deformations of holomorphic map-germs

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The theory of deformations of germs of holomorphic mappings, also known as Thom-Mather theory, shares many features with the theory of deformations of germs of complex hypersurfaces. But, for any result about hypersurfaces, the corresponding result about mappings tends to be much harder to prove. In this talk we will discuss open problems about singular mappings, based on the following known results about isolated hypersurface singularities:

- The Milnor number is greater than or equal to the Tjurina number and their quotient cannot exceed the dimension of the ambient space.
- If two hypersurfaces have the same topological type, then their Milnor numbers are equal.

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