COMPUTING INVARIANTS IN SINGULARITY THEORY BY MEANS OF EMBEDDED Q-RESOLUTIONS

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In my PhD thesis [3], we have introduced the notion of embedded **Q**-resolution, which essentially consists in allowing the final ambient space to contain abelian quotient singularities. In this talk we will give a generalization of A'Campo's formula [1], cf. [2], for the monodromy zeta function of a singularity in this setting [4].

This work is motivated by the fact that the combinatorial and computational complexity of embedded **Q**-resolutions is much simpler than the one of the classical embedded resolutions, but they keep as much information as needed for the understanding of the topology of the singularity.

This problem has been considered in [5] for plane curve singularities.

Although some objects and tools appearing in this work are a bit delicate to deal with, we will keep the talk rather elementary and provide the necessary preliminaries.

References

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