

Topological classification and finite determinacy of knotted maps.

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In this talk, we show that the knot type of the link of a real analytic map germ with isolated singularity $f: (\mathbb{R}^2, 0) \rightarrow (\mathbb{R}^4, 0)$ is a complete invariant for C^0 - \mathcal{A} -equivalence. Moreover, we also prove that isolated instability implies C^0 -finite determinacy, giving an explicit estimate for its degree. For the general case of real analytic map germs, $f: (\mathbb{R}^n, 0) \rightarrow (\mathbb{R}^p, 0)$ ($n \leq p$), we use the Lojasiewicz exponent associated to the Mond's double point ideal $I^2(f)$ to obtain some criteria of Lipschitz and analytic regularity.

This a joint work with Juan Jose Nuño Ballesteros.