

## Projections of space curves

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Given a space curve (in  $\mathbb{R}^3$ ) one can consider its orthogonal projections to planes. The projected curves can be singular and there is a classification of their generic singularities and the way these bifurcate as the direction of projection changes locally on the sphere  $S^2$ . Dias and Nuño Ballesteros considered, using divergent diagrams, the contact of a project curve with lines. This study captures the singularities as well as the inflections of the projected curve. In a joint work with Raul Oset Sinha, we gave an alternative approach by considering, for a single projection, submersions on a (singular) plane curve. We also redraw the bifurcation diagrams of the orthogonal projections of space curves adding the information about their inflections. The inflections can also be captured by considering the dual of the projected curve. We do this, and consider also the way the dual curves bifurcate as the direction of projection varies locally in  $S^2$ .

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