

# Bifurcations of non-smooth vector fields on $\mathbb{R}^3$ . The Cusp-Fold singularity

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This article presents results concerning a class of generic one-parameter families of 3D piecewise-smooth vector fields. The dynamics of the so called fold-cusp singularity is studied and its bifurcation diagram is exhibited. Results about the asymptotical stability of systems presenting such singularities are also discussed