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# THE UNIQUENESS AND STABILITY OF UNFOLDINGS OF EQUIVARIANT TWO-PARAMETER BIFURCATION PROBLEMS

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ABSTRACT. Under the action of $\Gamma$-equivariant $U$-equivalence group, we study the unfoldings of equivariant two-parameter bifurcation problems of finite codimension, where the bifurcating parameters are of vector value. The main results: (1) the equivalence classes of $k$-parameter versal unfoldings of a $\Gamma$-equivariant bifurcation problem are one-to-one corresponding to the orbit of the bifurcation problem, (2) the stability theorem and the versal unfolding theorem, a lemma is proved and by means of it we give simple proofs of the theorems.

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