SOME RESULTS ON PAIRS OF INVOLUTIONS

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In this work we present the study of pairs (φ_1, φ_2) of involutions on $(\mathbb{R}^n, 0)$ associated with divergent diagrams of folds $(f_1, f_2) : (\mathbb{R}^n, 0) \to (\mathbb{R}^n \times \mathbb{R}^n, 0)$. We also obtain normal forms for the pairs (φ_1, φ_2) and, consequently, normal forms for the corresponding divergent diagram of folds (f_1, f_2) , when the involutions are linear and transversal. In addition, we present a discussion of our results to the study of a class of discrete reversible dynamical systems. Finally, we give a characterization of the group generated by any pair of linear involutions.

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