LENNARD BAKKER, Brigham Young University
Dynamics and Generalized Symmetries

The symmetries of a flow play an important role in the analysis of its dynamics. Typical symmetries that a flow might possess are diffeomorphisms R that map the generating vector field X of the flow to $R_*X = \pm X$. A generalization of these symmetries are diffeomorphisms R that map X to $R_*X = \mu X$ for $\mu \in \mathbb{R}^\times \setminus \{1, -1\}$. We present theory and examples on the classification of equilibrium-free flows that possess these generalized symmetries.