

Conley theory for S^1 -isolated invariant sets

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Abstract: In this talk, we make use of Conley Index Theory to capture the connections between S^1 -critical manifolds of a Morse-Bott flow, as well as periodic orbits of a Morse-Smale flow. Our goal is to obtain results on dynamical cancellations of these types of S^1 -isolated invariant sets in a smooth flow. In order to achieve that, we make use of a rich algebraic-topological tool which provides much insight into dynamical properties of the system.