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An Index of an Equivariant Vector Field and Addition Theorems for Pontrjagin Characterictic Classes

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ABSTRACT

The theory of indices of Morse-Bott vector fields on a manifold is consructed and the famous localization problem for the transfer map is solved on its base. As a consequence, we obtained addition theorems for the universal Pontrjagin characterictic classes in cobordisms. These results gave us a possibility to complete the construction, which was begun more then twenty years ago, of the theory of universal characterictic classes.