ON THE COHOMOLOGICAL DEGREE OF MAPS BETWEEN GENERALIZED MANIFOLDS

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Generalized manifolds are a class of spaces which reflect many of the local and global homology properties of the topological manifolds. They were introduced by Čech and Lefschetz and were studied in detail in R.L. Wilder's book, *topology of Manifolds*. Generalized manifolds show up naturally in topological problems in the theory of transformation groups and in some other parts of topology.

The notion of degree, which was introduced by Brouwer, is an important object in algebraic topology to the study of continuous maps. After some time, based on higher (co)homologies of manifolds, a fairly complete (co)homological degree theory was constructed and successfully applied, first for continuous maps of compact manifolds only, then for proper continuous maps of arbitrary orientable topological manifolds, and later including manifolds with boundaries.

We are concerned in studying the cohomological degree of continuous maps between generalized manifolds, including generalized manifolds with boundaries. Here the degree is constructed using results of the cohomology and homology theory of topological spaces with coefficients in a sheaf. The importance of working with this type of coefficients is because the generalized manifolds are defined in terms of the sheaves theory and moreover the sheaves allow that the Poincaré Duality be satisfied for these spaces not necessarialy orientable.

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