

Isovariant fibrant spaces

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Abstract: A G -map $f : X \rightarrow Y$ is called isovariant if it preserves isotropy subgroups, that is, $G_x = G_{f(x)}$ for all $x \in X$. For a given compact group G we consider the category $ISOV-\mathcal{M}$ of metrizable G -spaces and isovariant maps. In a natural way the notion of an isovariant absolute (neighborhood) extensor ($IsoV-A(N)E$) can be introduced. One of remarkable properties of $IsoV-ANE$'s is the following: if Y is an $IsoV-ANE$ then every G -map $f : X \rightarrow Y$ is homotopic to isovariant one. In our talk we are going to speak of fibrant spaces and fibrations in the category $ISOV-\mathcal{M}$. In particular, we show that isovariant fibrant spaces have the property of $IsoV-ANE$'s, mentioned above.