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LOCALIZATION GENUS

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Abstract: Which spaces look like an n-sphere through the eyes of the n-th Postnikov section functor and the n-connected cover functor? The answer is what we call the Postnikov genus of the n-sphere. We define in fact the notion of localization genus for any homotopical localization functor in the sense of Bousfield and Dror Farjoun. This includes exotic genus notions related for example to Neisendorfer localization, or the classical Mislin genus, which corresponds to rationalization.

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