

Finite-to-one maps into manifolds and spaces with disjoint disks properties

Alex Karassev (Nipissing University)

Coauthors: Murat Tuncali and Vesko Valov

A finite-dimensional space M has the parametric regularly m -branched maps property provided for every perfect surjection $f: X \rightarrow Y$ between finite-dimensional metric spaces the set of all f -regularly m -branched maps $g: X \rightarrow M$ is dense in $C(X, M)$. We prove that the parametric regularly m -branched maps property is a local property. We use this result to show that every manifold has such property. We also obtain applications for finite-to-one maps into certain products.