Homogeneous Finite-Dimensional Metric Compacta

Vesko Valov

Department of Computer Science & Mathematics Nipissing University, North Bay E-mail: veskov@nipissingu.ca

ABSTRACT

The local homological and cohomological structure of finite- dimensional metric ANR compacta will be discussed in this talk. The research in that area is motivated by the famous Bing-Borsuk conjecture that every n-dimensional metric homogeneous ANR compactum is an n-manifold. Although Bryant- Ferry announced before few months the existence of a counter-example to that conjecture, the local homological and cohomological structure of any homogeneous metric n-dimensional ANR compactum is similar to the local structure of the Euclidean n-dimensional space.