On Homogeneous Coverings of Euclidean Space and Euclidean Plane

In our talk the problem of homogeneous coverings of Euclidean space and Euclidean plane by Jordan curves will be discussed. Decisions of the problem for the space will be shown. Namely, homogeneous coverings of the space by circumferences will be constructed. Also, even homogeneous coverings of the space by congruent circumferences will be constructed. The existence of odd homogeneous coverings of the space by congruent circumferences will be established. Decisions of the same problem for the plane will be presented. Based on the principal difference between homogeneous coverings of the space and homogeneous coverings of the plane the known result on Euclidean space and Euclidean plane nonhomeomorphicity will be deduced.