Representation of images of flat and spatial objects by a set of ellipsoids

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Abstract

The paper considers an approach to the analysis of the geometric characteristics of two- and three-dimensional images based on the representation of the latter by a set of geometric primitives – ellipsoids. The main characteristics of ellipsoids in n-dimensional affine space are considered, the operation of adding ellipsoids and their weighted sum are determined.

Keywords: ellipsoid, two- and three-dimensional image, affine space are.

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