

# The empty sphere and the concept of dilemmas

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## Abstract

The discussion of the empty sphere is accompanied by the definition of a novel structure for the Euclidean empty sphere, which is the quasi-polygonal form of the geometry of a quiver of the geometrical string. The structure of the empty sphere is extended to include a non-polygonal form. The definition of a non-polygonal form of the empty sphere is based on the existence of the non-polygonal form in the Geometric Formalism. The geometry of the empty sphere is defined for a given vector bundle, which is the inverse of the Euclidean geometrical unit bundle. The definition of the empty sphere is derived by using the symmetric geometrical form of the geometrical string.