

## Homogeneous $C^*$ -algebras

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Every homogeneous  $C^*$ -algebra corresponds to the algebraic fibre bundle.  $C^*$ -algebra is called non-trivial if the corresponding algebraic fibre bundle is non-trivial. All  $C^*$ -algebras generated by idempotents that studied before corresponded to the trivial algebraic fibre bundles. In the work was showed that every homogeneous separable non-commutative  $C^*$ -algebra can be generated by idempotents. It is follows from here that we need to study the topology properties of  $C^*$ -algebras generated by idempotents to describe such algebras properly. Also in the work we found the minimal number of idempotent generators for every homogeneous  $C^*$ -algebra  $A$  with the set of maximal ideals homeomorphic to the sphere  $S^2$ .