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"K-theory over C*-algebras"

1. Some elementary and evident examples.
2. Almost flat bundles from the point of view of C*-algebras.
3. Twisted K-theory due to M.Atiyah and G.Segal. .

Abstract: In the minicourse I would like to discuss what relation has the theory of C^* -algebras to the classical problems from K -theory. Some elementary and evident examples are connected with different ways of description of vector bundles, elliptic operators from the point of view of their generalizations to non simply connected manifolds. As concrete examples of the latest application two problems will be discussed:

1. Almost flat bundles from the point of view of C^* -algebras.
2. Construction of Fredholm operators over C^* -algebras which don't admit adjoint operators.