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On the Baum-Connes conjecture for groups acting on CAT(0)-cubical spaces. (English) Zbl 07381572

Summary: We give a new proof of the Baum-Connes conjecture with coefficients for any second countable, locally compact topological group that acts properly and cocompactly on a finite-dimensional CAT(0)-cubical space with bounded geometry. The proof uses the Julg-Valette complex of a CAT(0)-cubical space introduced by the 1st three authors and the direct splitting method in Kasparov theory developed by the last author.

MSC:
57S20 Noncompact Lie groups of transformations
19K35 Kasparov theory (\(KK\)-theory)
22F05 General theory of group and pseudogroup actions
46L80 \(K\)-theory and operator algebras (including cyclic theory)

Full Text: DOI