

Oberseminar Topologie: 15.11.2023

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Title: Stability and instability of bounded cohomology

Abstract: Classical homological stability results are usually proven by establishing an acyclicity result for some simplicial complex. This approach can be adapted to bounded cohomology to yield stability for the bounded cohomology of a sequence of groups. In order to accomplish this one needs a uniform version of acyclicity for these simplicial complexes which will be introduced during the talk. This approach can be used to prove stability for certain sequences of linear groups and the failure thereof can be used to obtain the instability for mapping class groups. Most of this is based on joint work with Robin J. Sroka.