

A Homology group entirely consisting of infinite commutator products

Andreas Zastrow* (Univ. Gdansk), Oleg Bolgopolski (Novosibirsk/Düsseldorf)

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| THU/P3 11:00–11:20 |
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In [1] Umed Karimov constructed a space which is a one-point-compactification of a telescope-type of a CW-complex. The relations that by the glueing of the CW-complex have been built into this space have been chosen in that way that every homotopy class of a path can be represented as an infinite product of commutators. In personal communications Umed asked me, whether such a space can have a first homology group. This talk will be about explaining, how in joint efforts with Oleg Bogopolski Umed's question finally could be answered in that way that the homology group is even is even uncountable.

- [1] U.K. KARIMOV: An example of a space of trivial shape, all finite coverings of which are cyclic, *Soviet. Math. Dokl.* **33** (1) (1986), 113-117. Russian original in: *Dokl. Akad. Nauk SSSR*, **286** (3) (1986), 531-534.