

Oberseminar Topologie: 7. Juni 2023

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**Title: A rational pullback decomposition of spaces of homeomorphisms of manifolds**

Abstract: I will describe work in progress with A. Kupers in which we construct a rational pullback decomposition of (a variant of) the space of homeomorphisms of a high-dimensional simply connected spin manifold. As one of the applications, we strengthen a result of Weiss by showing that the stabilisation map  $\text{Top}(d) \rightarrow \text{Top}$  of the homeomorphism group of Euclidean  $d$ -space has rationally a section as long as  $d > 5$ .