

THE GALATIUS–MADSEN–TILLMAN–WEISS THEOREM

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ABSTRACT

I will sketch the proof of the Galatius–Madsen–Tillman–Weiss theorem (GMTW) by Galatius–Randal-Williams in their paper "Monoids of moduli spaces of manifolds", as I did in my bachelor thesis. GMTW determines the homotopy type of the classifying space of the cobordism category. I hope the geometric ideas will be enticing for attendees of any mathematical "level" and that the presentation can serve as an introduction to this intersection of manifold theory and homotopy theory. Hopefully, there will be time for more technical questions afterward. Write me, if you want to know how to prepare for this with what time you have (even if it is not a lot).