

Frobenius structure on a restricted (2+1)-TQFT

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Abstract. We consider certain subcategories of 3Cob whose objects are collections of tori. Arrows are generated by (co)multiplication and (co)unit, together with the action of the mapping class group of torus. With the help of detected Frobenius structure our goal is to construct TQFTs for such categories. On the way we manage to distinguish some torus bundles that are not distinguished by Reshetikhin–Turaev and Turaev–Viro invariants (see [1] and [2]).

Keywords: (2+1)-TQFT; 3Cob; Frobenius algebra; 3Cob.

References

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