On the volume and the Chern-Simons invariant for the 2-bridge link orbifolds

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This is joint work with Joongul Lee, Alexander Mednykh, and Aleksey Rasskazov

We extend some part of the unpublished paper [1] written by Mednykh and Rasskazov. Using the approach indicated in this paper we derive the Riley–Mednykh polynomial for some family of the two bridge link orbifolds. As a result we obtain explicit formulae for the volume of cone-manifolds and the Chern–Simons invariant of orbifolds of the knot with Conway's notation C(2n, 4).

References

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