

The twisted Alexander polynomial for finite abelian covers over three manifolds with boundary

Jérôme Dubois, Yoshikazu Yamaguchi

(Submitted on 17 Jul 2011 (v1), last revised 16 Jan 2012 (this version, v3))

We provide the twisted Alexander polynomials of finite abelian covers over three-dimensional manifolds whose boundary is a finite union of tori. This is a generalization of a well-known formula for the usual Alexander polynomial of knots in finite cyclic branched covers over the three-dimensional sphere.

Comments: 10 pages, v3: The organization was changed. This paper focuses on proving the formula of the twisted Alexander polynomial for finite abelian covering spaces, typos corrected and the main statement and proof were improved, to appear in Algebraic & Geometric Topology

Subjects: **Geometric Topology (math.GT)**

MSC classes: 57M25, 57M27

Cite as: **arXiv:1107.3283 [math.GT]**

(or **arXiv:1107.3283v3 [math.GT]** for this version)

Submission history

From: Yoshikazu Yamaguchi [[view email](#)]

[v1] Sun, 17 Jul 2011 08:13:57 GMT (32kb)

[v2] Fri, 12 Aug 2011 11:04:39 GMT (34kb)

[v3] Mon, 16 Jan 2012 06:21:04 GMT (13kb)

[Which authors of this paper are endorsers?](#)

Download:

- [PDF](#)
- [PostScript](#)
- [Other formats](#)

Current browse context:

math.GT

[< prev](#) | [next >](#)

[new](#) | [recent](#) | [1107](#)

Change to browse by:

[math](#)

References & Citations

- [NASA ADS](#)

Bookmark([what is this?](#))



Science
WISE