

List of Publications – Dr. Boris Vertman

Recent Advances on the Analytic Torsion of Singular Spaces

Oberwolfach Report of the Workshop on "Analysis and Geometric Singularities"

Regular-singular Sturm-Liouville operators and their zeta-determinants

with Matthias Lesch, submitted to Journal of Functional Analysis, arXiv:1005.0368, (2010)

Metric Anomaly at the Regular Boundary of Analytic Torsion for a Bounded Generalized Cone, I. Odd Dimensional Generalized Cone, arXiv:1004.2067, (2010)

Metric Anomaly at the Regular Boundary of Analytic Torsion for a Bounded Generalized Cone, II. Even Dimensional Generalized Cone, arXiv:1004.2069, (2010)

Gluing Formula for Refined Analytic Torsion

submitted to Proceedings of London Mathematical Society, arXiv:0808.0451, (2009)

Analytic Torsion of a Bounded Generalized Cone

Communications in Mathematical Physics, 290 (2009), no. 3, 813–860.

Zeta determinants for regular-singular Laplace-type operators

Journal of Mathematical Physics 50 (2009), no. 8, 083515, 23 pp

Refined analytic torsion on manifolds with boundary

Geometry and Topology 13 (2009), no. 4, 1989–2027.

Exotic Expansions and pathological properties of zeta-functions on conic manifolds

K. Kirsten, P. Loya, J. Park with an Appendix by Boris Vertman,

Journal of Geometric Analysis 18, (2008), 835-888.

Doctoral Thesis: *Analytic Torsion of Manifolds with Boundary and Conical Singularities*

University Bonn Press (2008)

Publications and Work in Progress

Heat Kernel and Analytic Torsion on Manifolds with Edges

with Rafe Mazzeo, (2010)

Elliptic Edge Degenerate Boundary Value Problems

with Rafe Mazzeo, (2010)

Ricci and Yamabe Flow on Manifolds with Conical Singularities

with Eric Bahuaud, (2010)

The Heat Equation on Edge Manifolds

with Eric Bahuaud and Emily Dryden, (2010)