1116-58-1882　　　**Phillip Andreae*** (`pandreae@math.duke.edu`). *Analytic torsion: generalized metric invariance.*
We study the Ray-Singer analytic torsion T associated to a flat vector bundle with hermitian metric h over an odd-dimensional compact manifold with Riemannian metric g. In the acyclic case (and, with the appropriate interpretation, more generally), T is known to be independent of the metrics h and g, i.e., T is a topological invariant. We frame the metric independence of T in terms of a certain closed one-form on the space of metrics, and we prove that furthermore T is independent of the metric on the exterior bundle, which may be chosen independently of g. (Received September 21, 2015)