

BOSTON UNIVERSITY GEOMETRY AND PHYSICS SEMINAR

**ABELIAN ANALYTIC TORSION AND
SYMPLECTIC VOLUME**

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Northeastern

Jan 29, 2014, 4:00 – 5:00pm
Math/Computer Science, Room148
111 Cummington Street, Boston

Tea: 3:45pm in Room MCS 144

Abstract: The goal of this talk is to present a theorem that computes the abelian analytic torsion for closed Sasakian three-manifolds. The (square root of the) torsion is identified as a specific scalar multiple of the natural unit symplectic volume form on the moduli space of flat abelian connections. The theorem will be motivated by a natural duality involving contact structures that occurs in abelian Chern-Simons theory on closed orientable three-manifolds.

See <http://math.bu.edu/research/geom/seminar.html> or contact Si Li sili@math.bu.edu for more information.