1023-57-1755 Christopher B. Truman* (cbtruman@math.umd.edu), 1301 Math Building, University of Maryland Campus, College Park, MD 20742. Turaev torsion and cohomology determinants for 3-manifolds with boundary. Preliminary report.

The Turaev torsion is a way of assembling the most interesting Reidemeister torsions into a single invariant. One can obtain a "leading order" term of the Turaev torsion from certain determinants in cohomology, first shown by Turaev for closed 3–manifolds, and extended to 3–manifolds with boundary by the author. I'll go over the definitions of Turaev torsion and cohomology determinants, and tell how they are related. (Received September 26, 2006)