

Meeting: 1002, Pittsburgh, Pennsylvania, SS 1A, Special Session on Invariants of Knots and 3-Manifolds

1002-54-220 **Frederick Goodman** and **Holly M Hauschild*** (hhauschi@math.uiowa.edu), 14 Maclean Hall,
University of Iowa, Iowa City, IA 52242-1419. *An Isomorphism Between Affine
Birman-Murakami-Wenzl Algebras and Tangles in the Solid Torus.* Preliminary report.

Affine Hecke algebras are regarded as extensions of Hecke algebras. Geometrically, this corresponds to considering braids in the solid torus rather than a solid cylinder (modulo appropriate relations). In the same way affine BMW algebras can be regarded as extensions of BMW algebras. We show that a natural extension of Morton and Wassermann's isomorphism between BMW algebras and tangles (modulo Kauffman relations) gives an isomorphism between affine BMW algebras and tangles in the solid torus. (Received September 14, 2004)