

1052-11-95

**Sharon Anne Garthwaite\*** ([sharon.garthwaite@bucknell.edu](mailto:sharon.garthwaite@bucknell.edu)), 380 Olin Science Bldg,  
Lewisburg, PA 17837. *The Quadratic AGM in the context of Mock Modular Forms.*

In this talk we see how hypergeometric series related to the quadratic arithmetic-geometric mean arise as the p-adic limit of certain weakly holomorphic modular forms. The proof follows a method of Guerzhoy, Kent, and Ono involving mock modular forms. This is joint work with Matt Boylan. (Received August 21, 2009)