

Meeting: 1003, Atlanta, Georgia, AMS CP 1, AMS Contributed Paper Session

1003-33-516 **Hieu D Nguyen*** (nguyen@rowan.edu), Department of Mathematics, Rowan University, 201
Mullica Hill Rd., Glassboro, NJ 08028. *Hypergeometric Zeta Functions*. Preliminary report.

In this talk I will give a preliminary report on my investigation of a family of higher-order *hypergeometric* zeta functions. These functions are obtained by replacing the difference $e^x - 1$ that appears in Riemann's integral formula for the classical zeta function with a higher-order Maclaurin difference. Besides discussing their hypergeometric nature, I will also present some analytical and combinatorial properties of these functions and make comparisons with the classical zeta function. (Received September 19, 2004)