1047-30-241Zhuan J Ye\* (ye@math.niu.edu), Department of Mathematics, Northern Illinois Univ, DeKalb,<br/>IL 60115. On the differential independence of the Riemann Zeta Function and the Euler Gamma<br/>Function. Preliminary report.

We prove that the Riemann  $\zeta$ -function and the Euler  $\Gamma$ -function cannot satisfy a class of algebraic differential polynomial equations whose coefficients are in **C** (joint work with Bao Qin Li). (Received January 29, 2009)