

1146-11-509

Marie Jameson* (mjameso2@utk.edu). *Zeta-polynomials and period polynomials for modular forms.*

In 2017, Ono, Rolin, and Sprung answered problems of Manin by defining zeta-polynomials $Z_f(s)$ for even weight newforms $f \in S_k(\Gamma_0(N))$. These polynomials are defined using (signed) Stirling numbers and weighted moments of critical L -values of f , they satisfy a functional equation $Z_f(s) = \pm Z_f(1-s)$, and they obey the Riemann hypothesis. Here, we give some additional properties satisfied by this beautiful class of polynomials. (Received January 29, 2019)