

1067-11-614

Caleb Emmons* (emmons@pacificu.edu), Dept. of Mathematics and Computer Science, 2043 College Way, Forest Grove, OR 97116. *Continuation of the Riemann zeta function via derivations*. Preliminary report.

A derivation on a ring is an operator that acts like a derivative, namely it is linear and satisfies the product rule. In this talk I show how they may be used on the ring of Dirichlet series to achieve meromorphic continuations. In particular, I will present a recipe for an infinite family of representations of the Riemann zeta function as a quotient of Dirichlet series converging on $\Re(s) > 0$. (Received September 12, 2010)