1086-34-1709   **R. Thelwell***, thelwerj@jmu.edu. *Power Series, Automatic Differentiation and Differential Equations.*

Power Series have historically been a powerful tool in the study of Differential Equations. We'll review a little of the history, and make new connections to method of Automatic Differentiation. Examples will include ODE, Analytic Continuation, Root finding and Special Functions. (Received September 24, 2012)