

Department of Mathematics and Statistics Colloquium

Power series and Nonlinear Differential Equations

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Abstract: Nonlinear Ordinary Differential Equations lie at the core of many applied math problems. Historically, classic series methods are used to generate solutions to linear problems. Recasting nonlinear problems as quadratic systems (a technique rediscovered and exploited by Parker and Sochacki) allows series to provide numeric and theoretic insight and intuition to these difficult problems. We will explore a few of the many problems for which series methods are powerful tool. The talk will be student friendly!

**Monday, December 1 at 3:45 in Room 103
refreshments at 3:30**