

# A Comparison of Classical and Modern Methods for Ordinary Differential Equations

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A year ago Bryce McLeod\* and I published a book, “Classical Methods in Ordinary Differential Equations”, in which we argue that standard ODE methods often have some advantages over more sophisticated techniques, such as functional analysis, calculus of variations, and dynamical systems, in the study of boundary value problems in ODEs. In this talk I will give several examples. In each case I will introduce the problem and describe two or three methods which have been used to prove existence of a solution. Of course, one of these methods will be a “classical” approach. I hope that the talk will be accessible to a general audience that includes graduate students.

\* Bryce was a University Professor in our department until his retirement in 2007.

The lecture will take place in Thackeray 704 at 4:00pm.  
Refreshments will start at 3:30pm.