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Thomas W Judson* (judsontw@sfasu.edu), Department of Mathematics and Statistics, Stephen F. Austin State University, P.O. Box 13040-3040 SFA Station, Nacogdoches, TX 75962, and **Theron Hitchman**. *Integrating Sage into an Ordinary Differential Equations Course using MathBook XML*.

The use of technology for the teaching and learning of ordinary differential equations has gained wide acceptance, yet the problem of seamlessly integrating technology into textbooks and other curricular materials is not an easy one. Technology for teaching an ordinary differential equations course usually falls into two categories—using software system such as Sage, MatLab, or Mathematica, or using a dedicated menu-driven ODE solver. Both have their advantages and limitations. One possible solution is MathBook XML, a lightweight XML application for authors of scientific articles, textbooks and monographs. When a document is written in MathBook XML, it is possible to quickly produce LaTeX, HTML print, PDF, web, EPUB, Sage Notebooks, and iPython Notebooks from a single source. With MathBook XML, it is easy for authors to include live Sage cells in a document with preloaded Sage code that can be processed on a remote server. Students may experiment by changing commands. Refreshing the webpage will restore the original Sage code. Since MathBook XML and Sage are open-source, they are ideal tools for both faculty and students. (Received September 08, 2015)