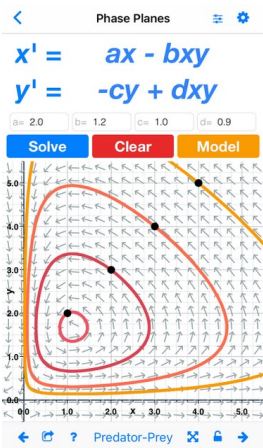


# Online Seminar on Undergraduate Mathematics Education

## Using Slopes to Enhance Learning in Differential Equations

Tim Lucas, Pepperdine University



Slopes is a mobile application with an intuitive interface, designed to visualize solutions to differential equations and support active learning in the classroom. To study the possible benefits of the app, we implemented group activities using Slopes into an ordinary differential equations class, conducted observations and focus groups, and examined final poster projects on modeling topics. We found that students used Slopes to visualize solutions, aid in discussion and cooperation, and demonstrate understanding of differential equations concepts. This talk will summarize the research as well as demonstrate how the app is used in a differential equations course.

**Noon ET, March 7, 2023**

Zoom link: <https://cornell.zoom.us/j/92415199317>, passcode olsume

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