

Abstract Submitted  
for the OSS18 Meeting of  
The American Physical Society

**Life After VPython: Developing E&M Computer Labs Using Matplotlib & Bokeh** THOMAS FINZELL, Univ of Michigan - Ann Arbor, DIALUP TEAM — The *Developers of Instructions, Assessments, and Lessons for Undergraduate Physics* (DIALUP) team at the University of Michigan has developed a suite of three novel computational labs for second semester introductory physics. Eschewing the oft used VPython package, we have instead incorporated components from popular Python visualization packages that students could potentially utilize in their future work; specifically, Matplotlib and Bokeh. Using these more modern packages allows us to incorporate many new tools, including Widgets, which can give students a new layer of information feedback. All of this lab material will be made available through the *Partnership for Integration of Computation into Undergraduate Physics* (PICUP) webpage. The DIALUP team is composed of: Chelsea Hendrus, Grace Kerber, Gle Leung, Jordan Roth, and Alec Tewsley-Booth.

Thomas Finzell  
Univ of Michigan - Ann Arbor

Date submitted: 02 Mar 2018

Electronic form version 1.4