

1135-A0-2444 **Jim Fowler*** (fowler@math.osu.edu) and **Bart Snapp** (snapp.14@osu.edu). *Using Ximera to build online interactive math activities.*

Many mathematicians are comfortable authoring handouts in LaTeX, but there is some pain in converting a paper or PDF handout into an interactive webpage with autograded questions. A solution is Ximera, an open-source system for deploying interactive LaTeX documents on the web. For instance, Ximera converts markup like $1 + 2 = \text{\answer{3}}$ into $1 + 2 =$ followed by a computer-graded answer blank, and then records whether or not a particular student entered a correct response into the gradebook in the LMS. By making deep use of git, Ximera enables teams of instructors to collaborate on the creation of online activities. The creators of Ximera will demonstrate the system and discuss the results of experiments comparing the performance of students using Ximera to students using commercial systems. (Received September 26, 2017)