

1135-P1-2123 **David Austin*** (austind@gvsu.edu), Department of Mathematics, Grand Valley State University, Allendale, MI 49401. *A new open-access, open-source linear algebra textbook.*

We will describe and demonstrate a new open-access, open-source linear algebra textbook, which will be available for use in Fall 2018. Currently, the text is suitable for a one-semester introduction to linear algebra though additional material for a second semester is planned. As the source is written in PreTeXt, it will be freely available in both PDF and HTML versions with the source code distributed freely as well. By including numerous activities suitable for in-class use, the text encourages active learning and aims to develop a conceptual and intuitive understanding of linear algebra as well as computational fluency in students. In addition, we hope to develop an appreciation for the usefulness of linear algebra through numerous applications such as computer animation, image compression, and Google's PageRank algorithm. The HTML version of the text encourages active reading through the inclusion of embedded Sage cells and interactive graphics written in Javascript. (Received September 25, 2017)