

1145-F5-574      **Minah Oh\*** (ohmx@jmu.edu). *Teaching Linear Algebra through its Applications*. Preliminary report.

When learning linear algebra for the first time as an undergraduate student, it may take some time to understand and appreciate the beauty and importance of the subject. In contrast, when students see an interesting real world application of mathematics, they immediately become passionate and interested in the subject. In this talk, I will present some applications of linear algebra that instantaneously grabbed my students interest in my undergraduate-level linear algebra class. Some of these applications are in image compression and biomedical engineering in the treatment of liver cancer. Furthermore, I will talk about how my motivated students learned the basics of the finite element methods by applying their knowledge in linear algebra. (Received September 10, 2018)