1163-F1-1154   **Tai-Danae Bradley*** (`tai.danae@math3ma.com`). *Exploring Language with Linear Algebra.*
The linear algebra of quantum mechanics provides a good starting point for investigating mathematical structure found in natural language. In this talk, I'll give a brief tour of these ideas, showing how a probability distribution on a finite set of sequences can be modeled by a rank 1 density operator, how to assign reduced density operators to expressions in language, and how this assignment fits nicely within the framework of category theory. (Received September 14, 2020)