

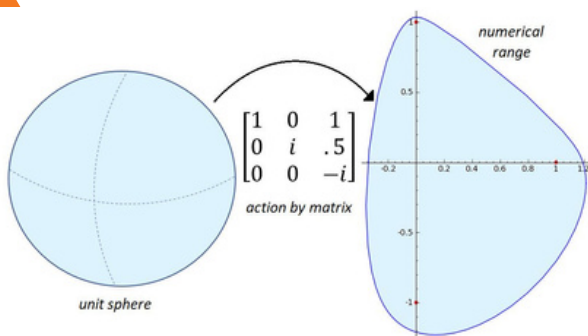


**Who are the people in your  
numerical range  
~~neighborhood?~~**

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The numerical range of a matrix is a set of numbers that results when a matrix is multiplied in a certain way by all unit vectors. Classically, we work with matrices that have complex numbers as entries and we can graph the corresponding numerical range on the complex plane. The numerical range is known to be convex (have no holes or dents) and contains the eigenvalues of the matrix. I first learned about the numerical range at a workshop in 2011, where I started working with some collaborators. In this talk, I will introduce the numerical range and some of the questions that we've investigated. I will also share the story of how our research has unfolded, both the various collaborators who have motivated and enriched the process and the lessons I've learned about doing math research.



**Friday, April 14**

**12:00 pm**

**PS 307**

**Zoom Meeting ID: 816 2003 0266**