

Math Club Meeting

Title of Talk: Making Matrices Better: The Geometry and Topology of Singular Value and Polar Decomposition

Speaker: Prof Herman Gluck, University of Pennsylvania

Abstract: We will draw pictures of the space of matrices of a given size, calling attention to the families of various ranks and how they fit together, and on the features that play central roles in singular value and polar decomposition of matrices. Then we'll see how these decompositions can be applied to computational comparative anatomy and to the design of facial recognition software. This is joint work with my colleague Dennis DeTurck and five grad students, Amr Elsaify, Benjamin Grossmann, Joseph Hoisington, Anusha Krishnan and Jianru Zhang.

Please join us this Friday, November 4th in Wachman 617 at 4pm. There will be free food!

