

VCU Discrete Mathematics Seminar

Discontinuous aspects of the generalized singular value decomposition

**Prof Brian Sutton
(Randolph-Macon College)**

Wednesday, Sept. 18
1:00-1:50 EDT

In person! in 4145 Harris Hall, and Zoom @
<https://vcu.zoom.us/j/92975799914>
password=graphs2357



The generalized singular value decomposition (GSVD) helps us to compare and contrast the row spaces of two given matrices A and B . In particular, it identifies linear subspaces that are (a) exclusive to A , (b) exclusive to B , and (c) common to A and B . We will illustrate the GSVD through a novel application to low-rank matrix completion, show how the result can be highly sensitive to certain discrete parameters, and suggest a potential open problem related to enumerative geometry and Young's lattice.

For the DM seminar schedule, see:

<https://go.vcu.edu/discrete>