Special VCU Statistics
& Discrete Mathematics Seminar

Spectral Clustering for
Divide-and-Conquer Graph Matching

Vince Lyzinski
Johns Hopkins University

Tuesday, Feb. 10
12:30–1:20
4145 Harris Hall

We present a parallelized bijective graph matching algorithm that leverages seeded vertices and is designed to match very large graphs. Our algorithm combines spectral graph embedding techniques with existing state-of-the-art seeded graph matching procedures. We first justify our approach by proving that modestly correlated, large stochastic block model random graphs are correctly matched utilizing very few seeds through our divide-and-conquer procedure, and we demonstrate the effectiveness of our approach in matching very large graphs in simulated and real data examples.

For more information on our exciting spring schedule, see:
`http://www.people.vcu.edu/~dcranston/DM-seminar/`