Yizhe Zhu

MSRI postdoc Office: 204

PhD from UC San Diego in 2021
Advisor: Ioana Dumitriu
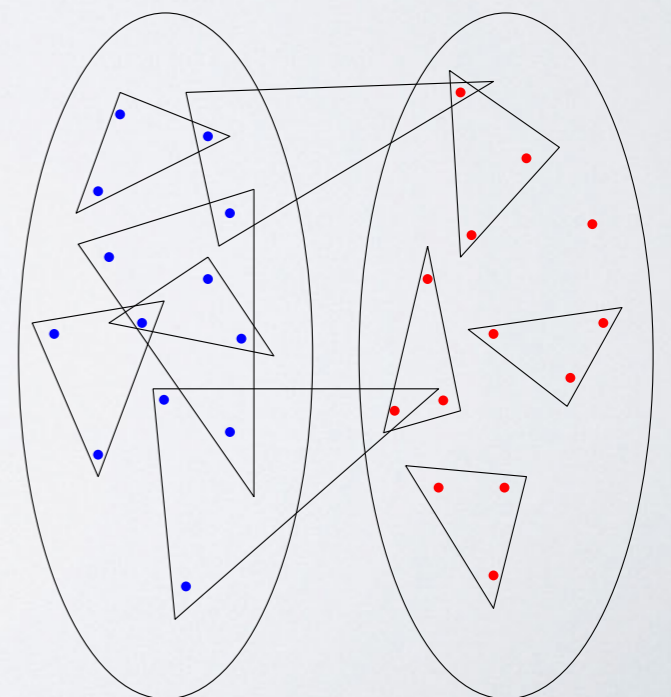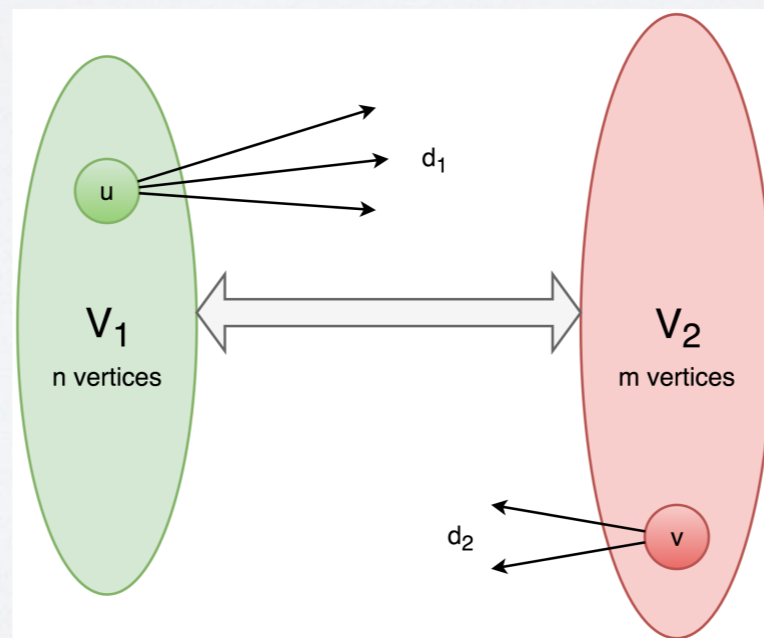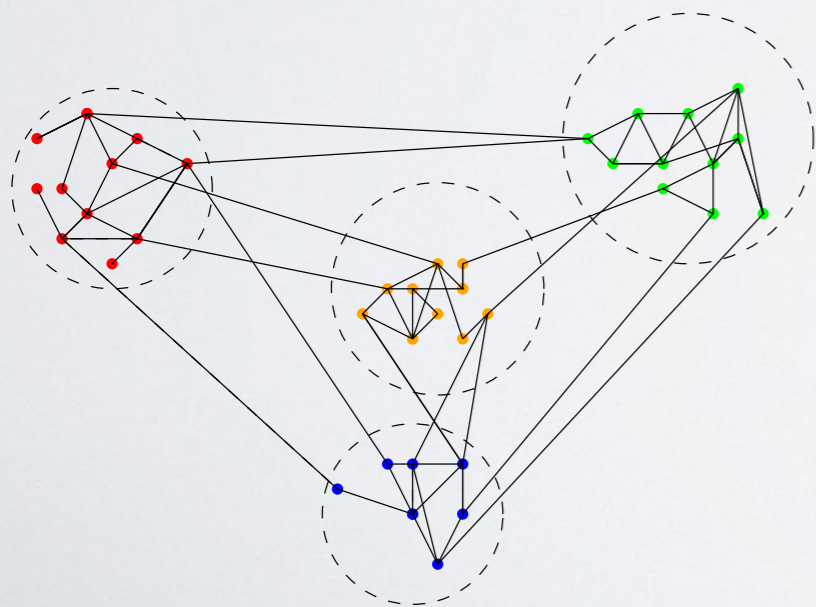After: Postdoc at UC Irvine

Research Interests:

Sparse random matrices, random graphs, random hypergraphs

And applications in data science:

community detection/spectral clustering, tensor completion, neural network

- Inhomogeneous Erdős–Rényi random graphs: Wigner-type matrices with variance profile, graphon theory, quadratic vector equations

- Stochastic block model: non-backtracking operator, spectral algorithm for hypergraph community detection

- Random bipartite biregular graphs: spectral gap, eigenvalue fluctuation, random regular hypergraphs

- Nonlinear random matrix: $Y = f(WX)$