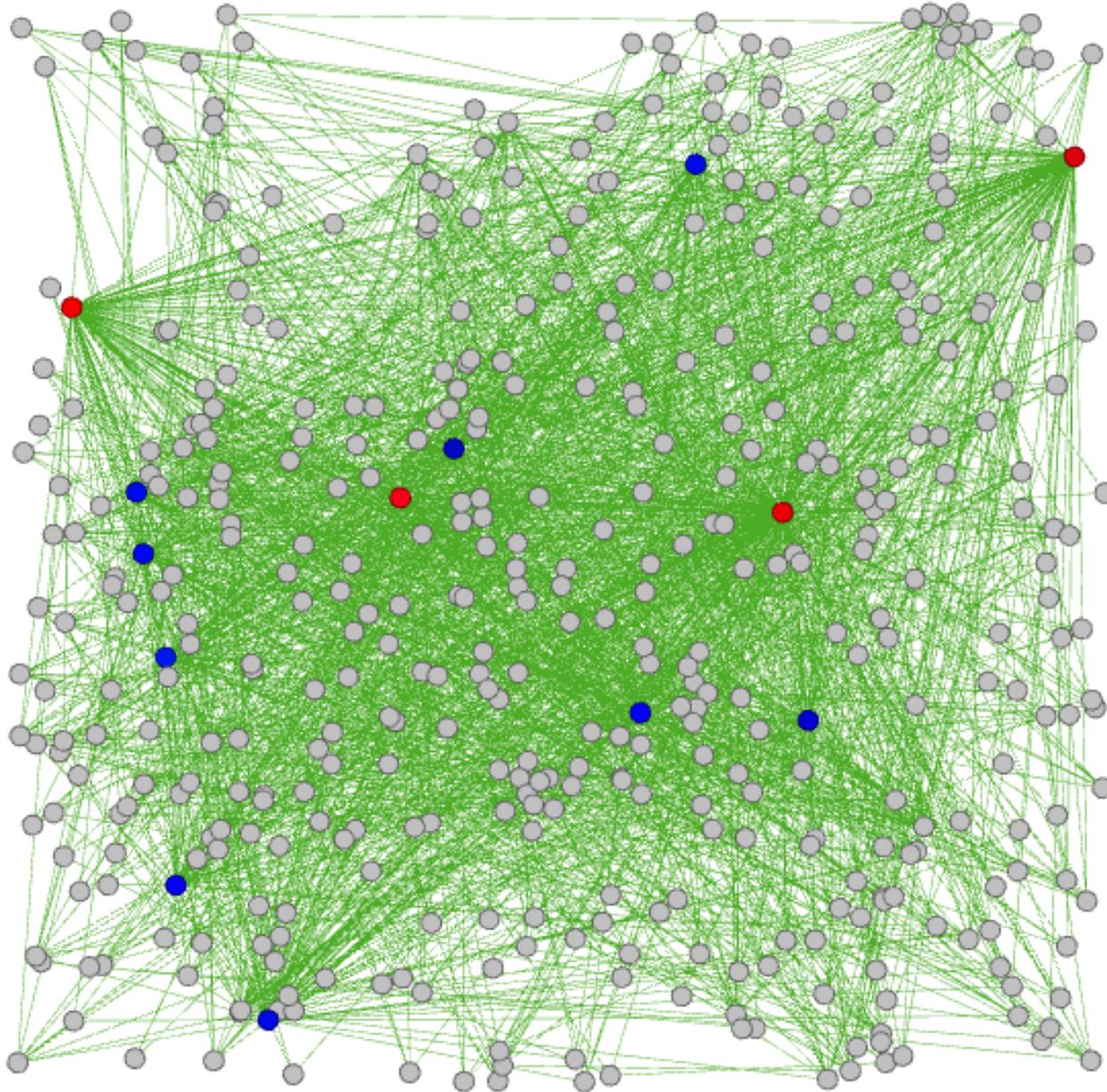


Alexander Lee: C: elegans metabolic network



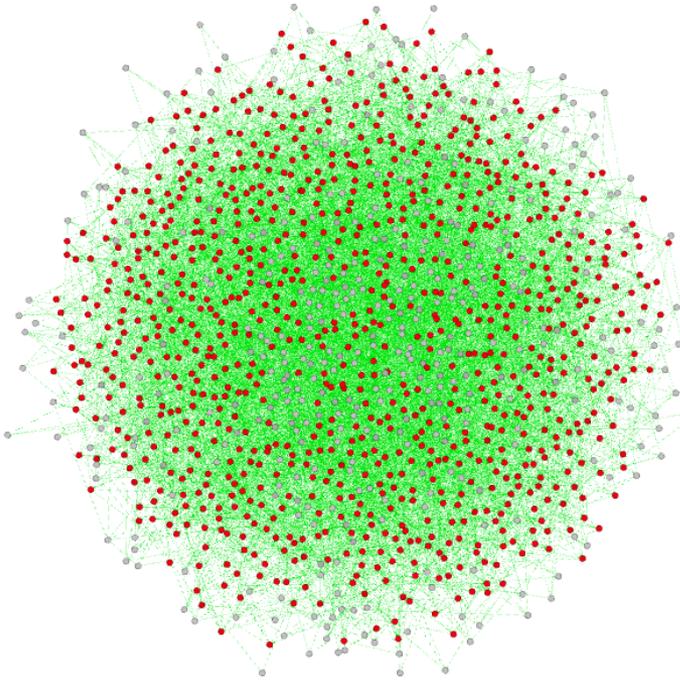
Graph of *C. elegans* metabolic network.

Note that some nodes very clearly have many more edges than others.

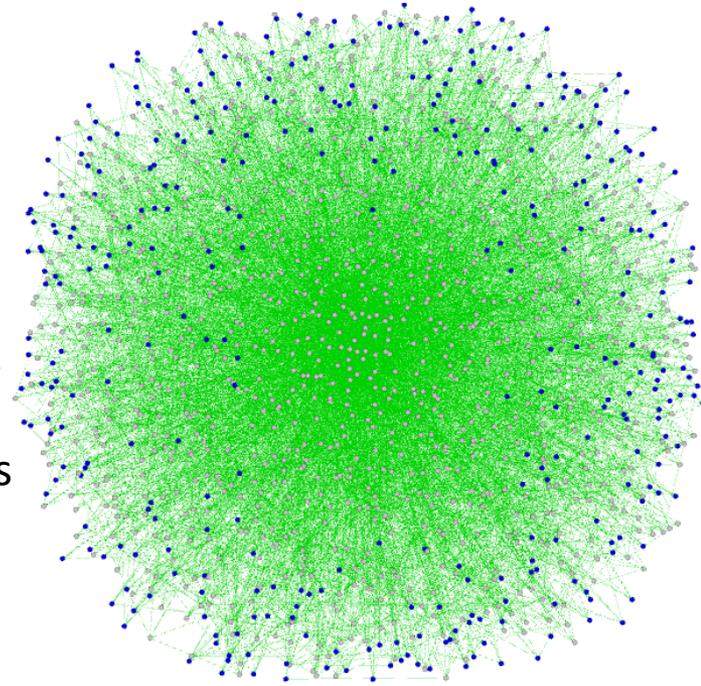
Red nodes – nodes with degree > 100

Blue nodes – nodes with degree > 50

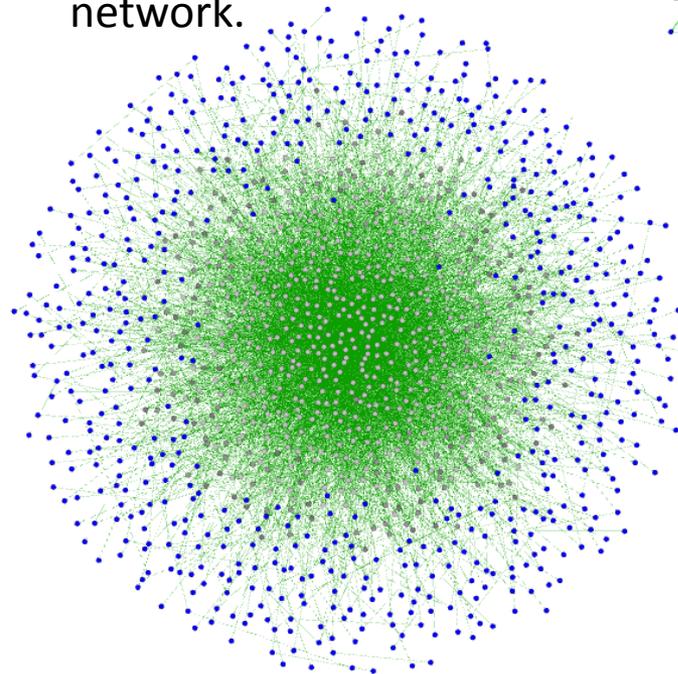
Alexander Lee: UC Irvine communication network



Graph of UC Irvine communication network. Blue nodes – nodes with degree ≤ 5 . These nodes account for 50.0% of the network.

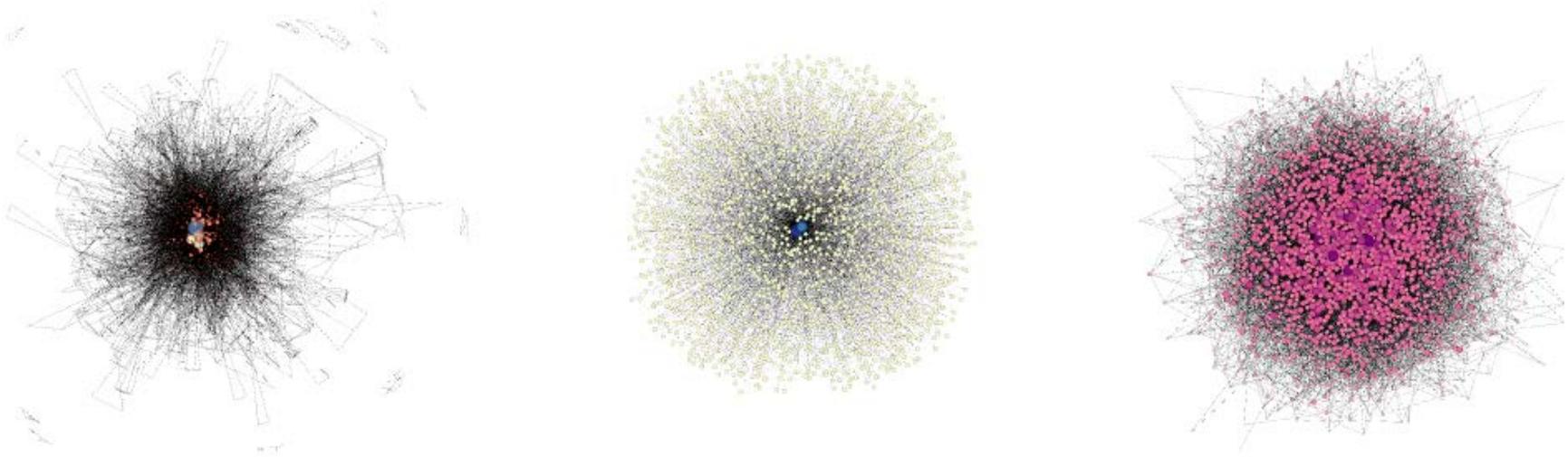


Graph of the corresponding random network. Red nodes – nodes with degree within one standard deviation of average degree

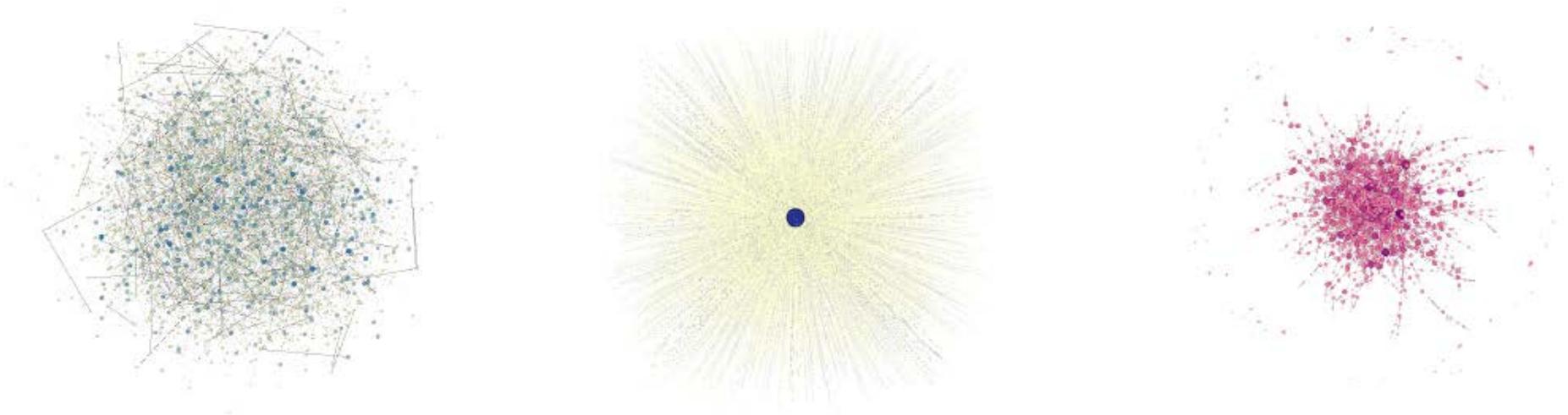


Graph of the corresponding scale-free network, by definition of BA there are no nodes with degree < 5 . Blue nodes – nodes with degree = 5 (28.3% vs. 50% in the real-world network,

Alex Meandzija: Biblical Proper Noun Network

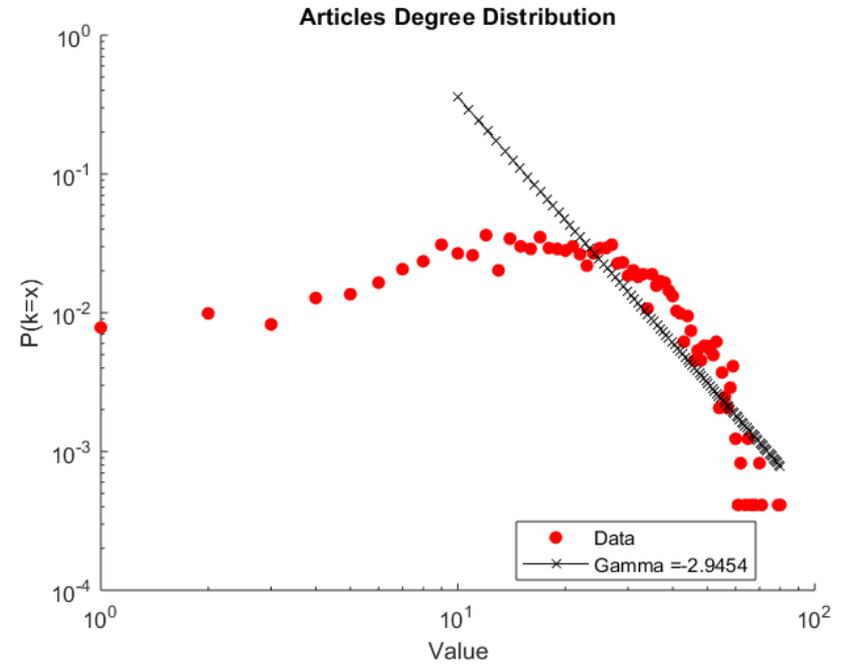
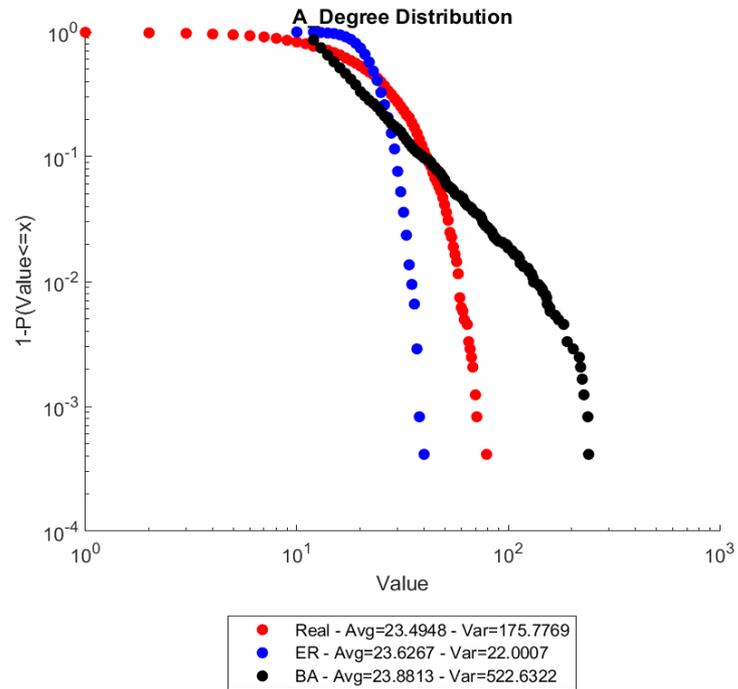


Visualization of (Left to Right) graph of Original, Barabasi-Albert, and Erdos Renyi



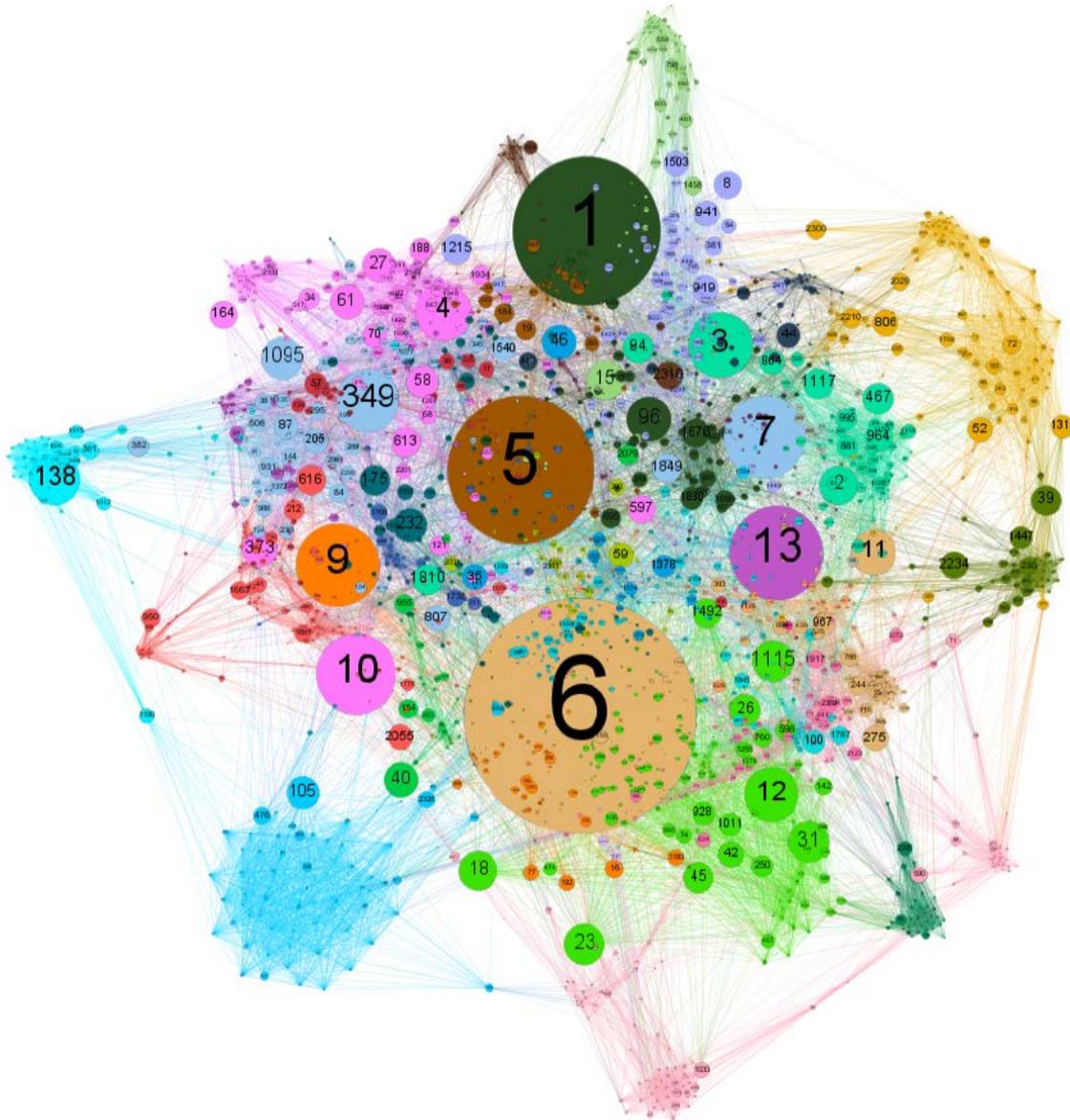
Visualization of (Left to Right) graph of Original, Barabasi-Albert, and Erdos Renyi

Bradley Mason: Article Network, use of log log scale



Network of similarity of publications in "Senior Scholars' Basket of Journals" (the top 8 IS journals) from 2005 to 2014

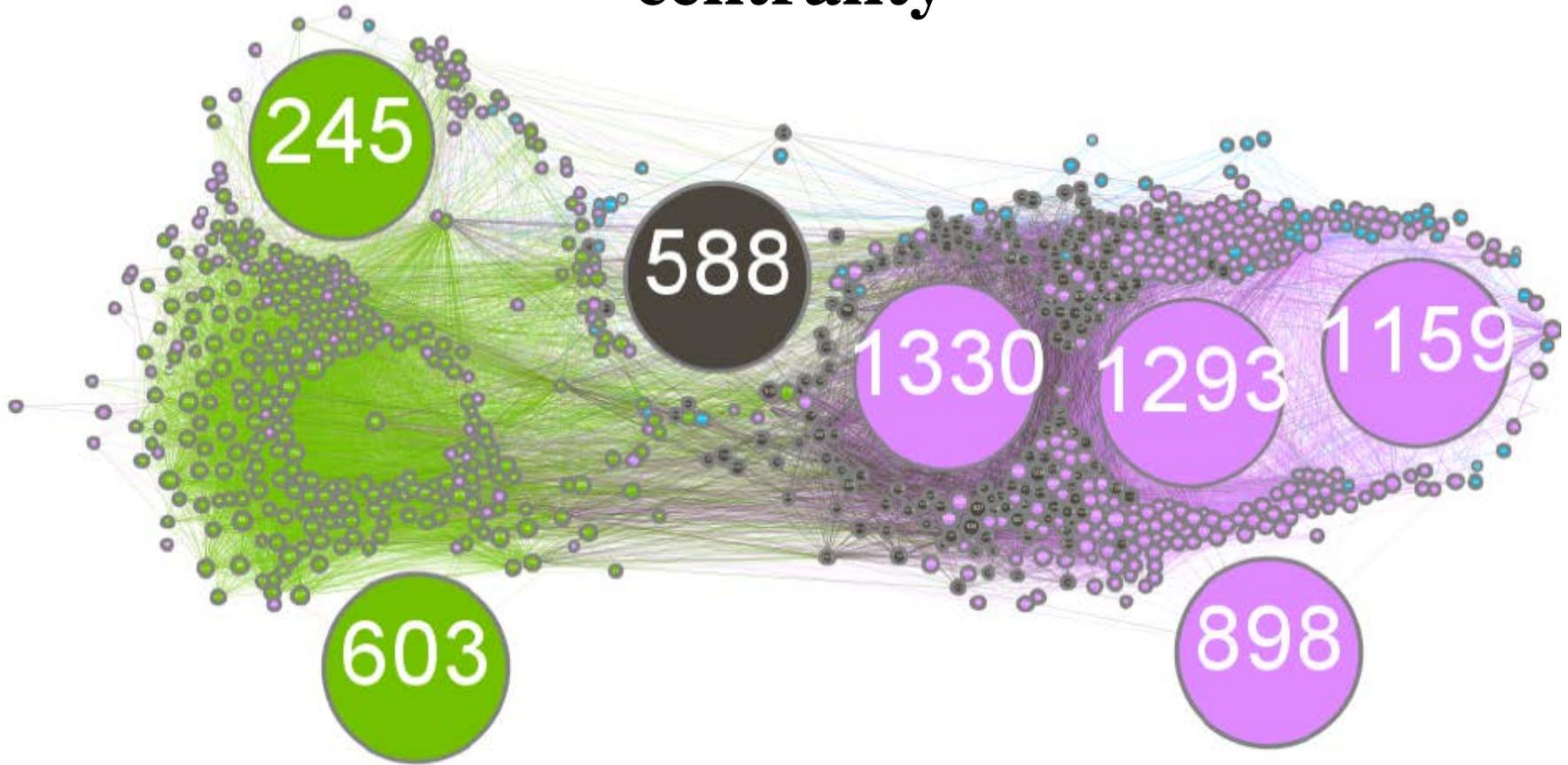
Bradley Mason: article network, using betweenness centrality



The network to the left is colored by modularity class and the node size is proportional to that node's betweenness centrality measure.

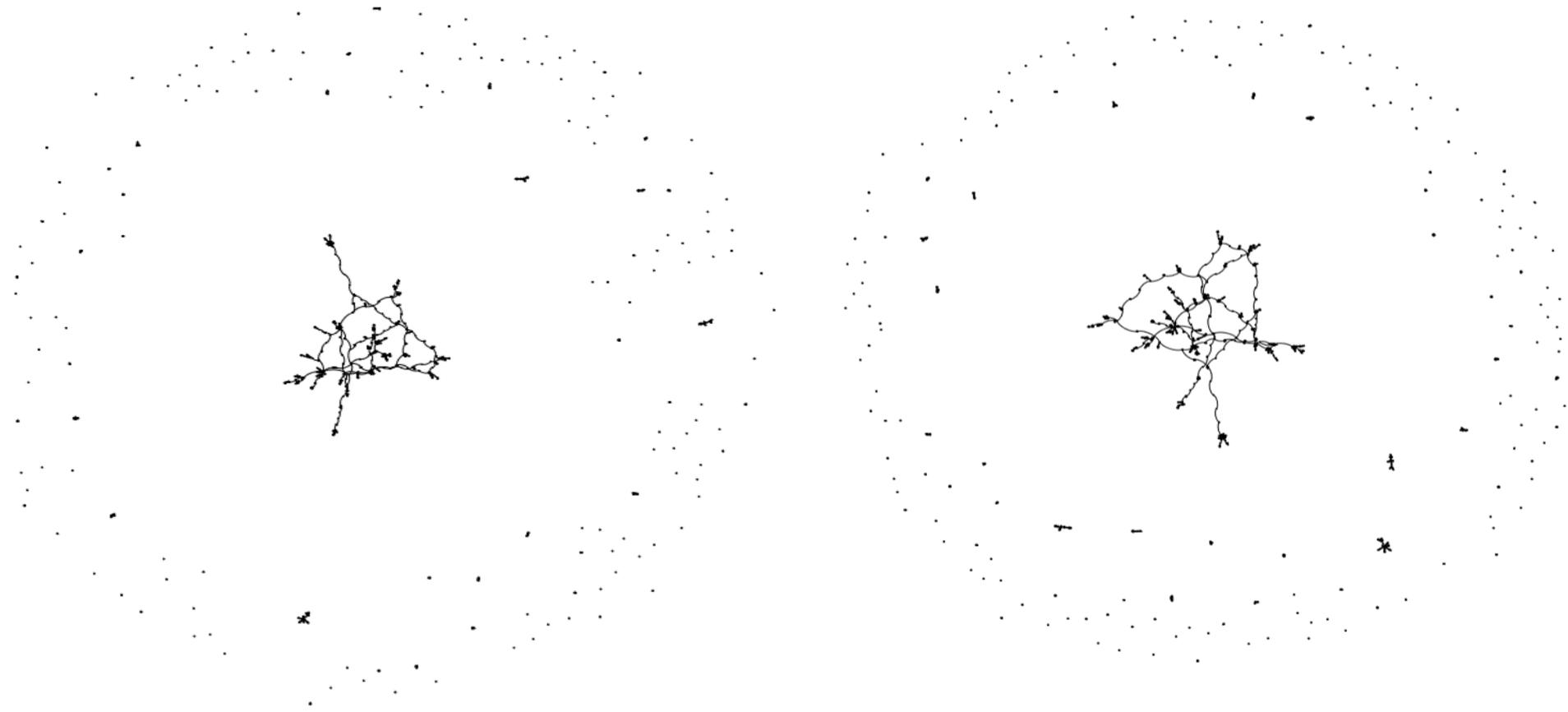
Scaling by betweenness centrality allows us to see which articles link to many different modularity classes and reveals which articles provide work that connects and unifies different areas.

Bradley Mason: article network, using closeness centrality



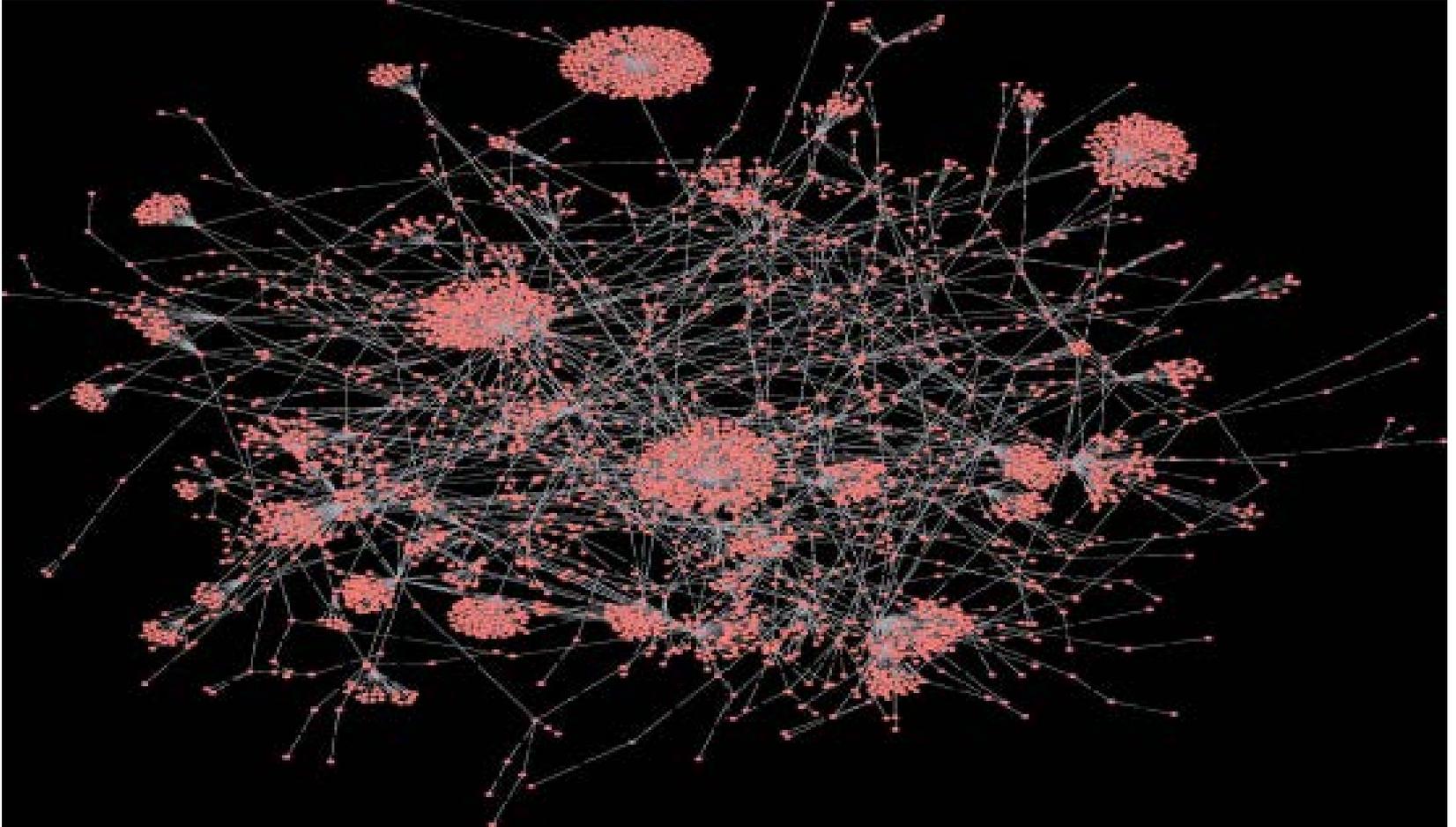
The network is colored according to modularity class with node size proportional to closeness centrality. Coloring by modularity allows us to see the different political groups. Because closeness measures how central a node is in the network, the large nodes in the above network correspond to blogs that pull information from a wide range of other blogs. The blogs have links to more parts of the network and are therefore presumably less partisan.

Manqing Ma: network science and Ph.D. networks



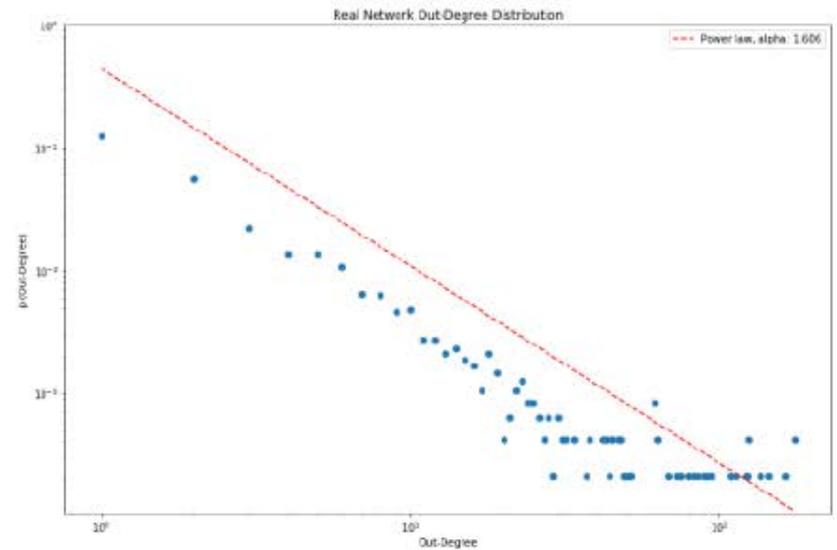
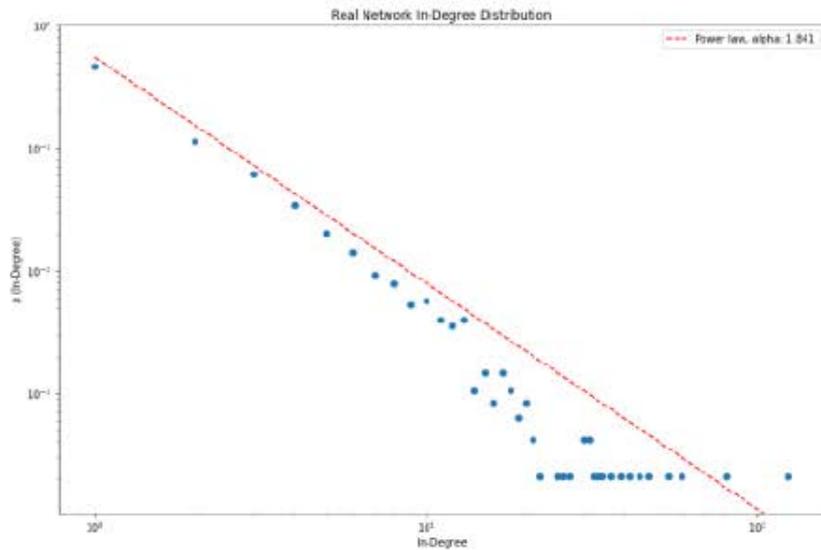
Similarity revealed by proper visualization

Varun Rao & Austin Egri: Obama retweet network



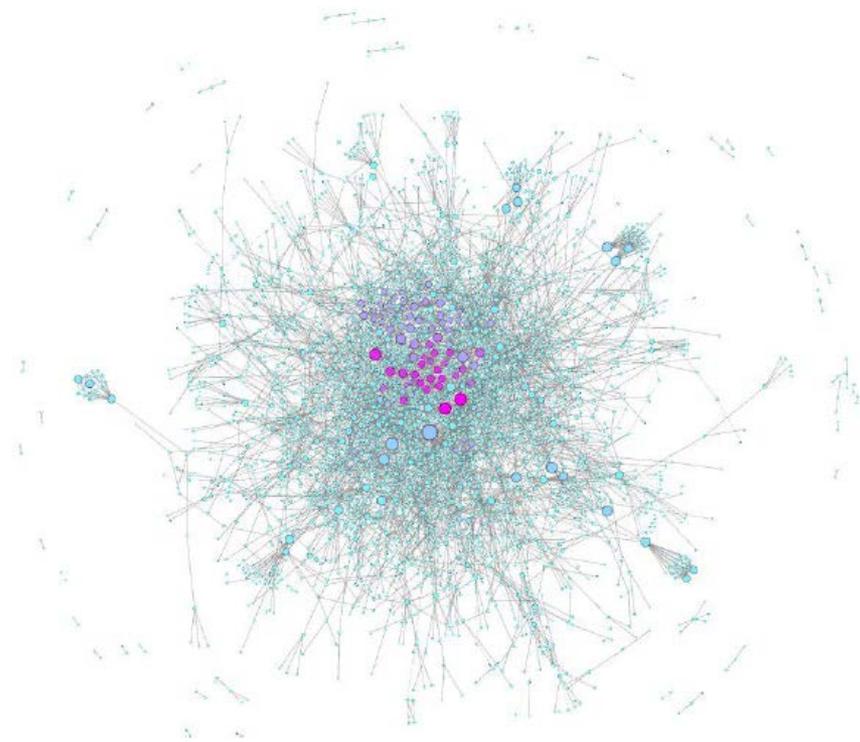
Notice similarity to bio-networks

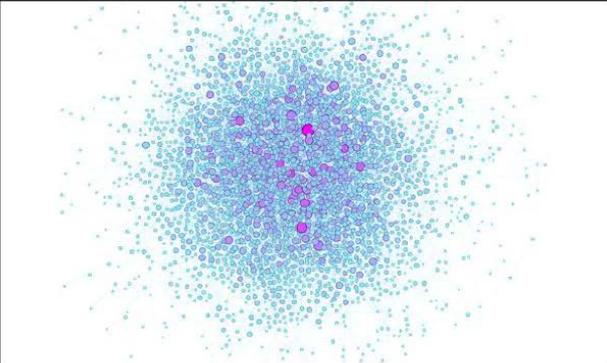
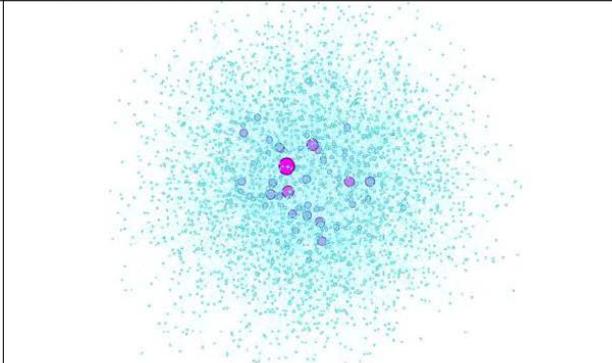
Kousuke Tachida: Network of fly (*D. melanogaster*) high-throughput protein-protein interactions



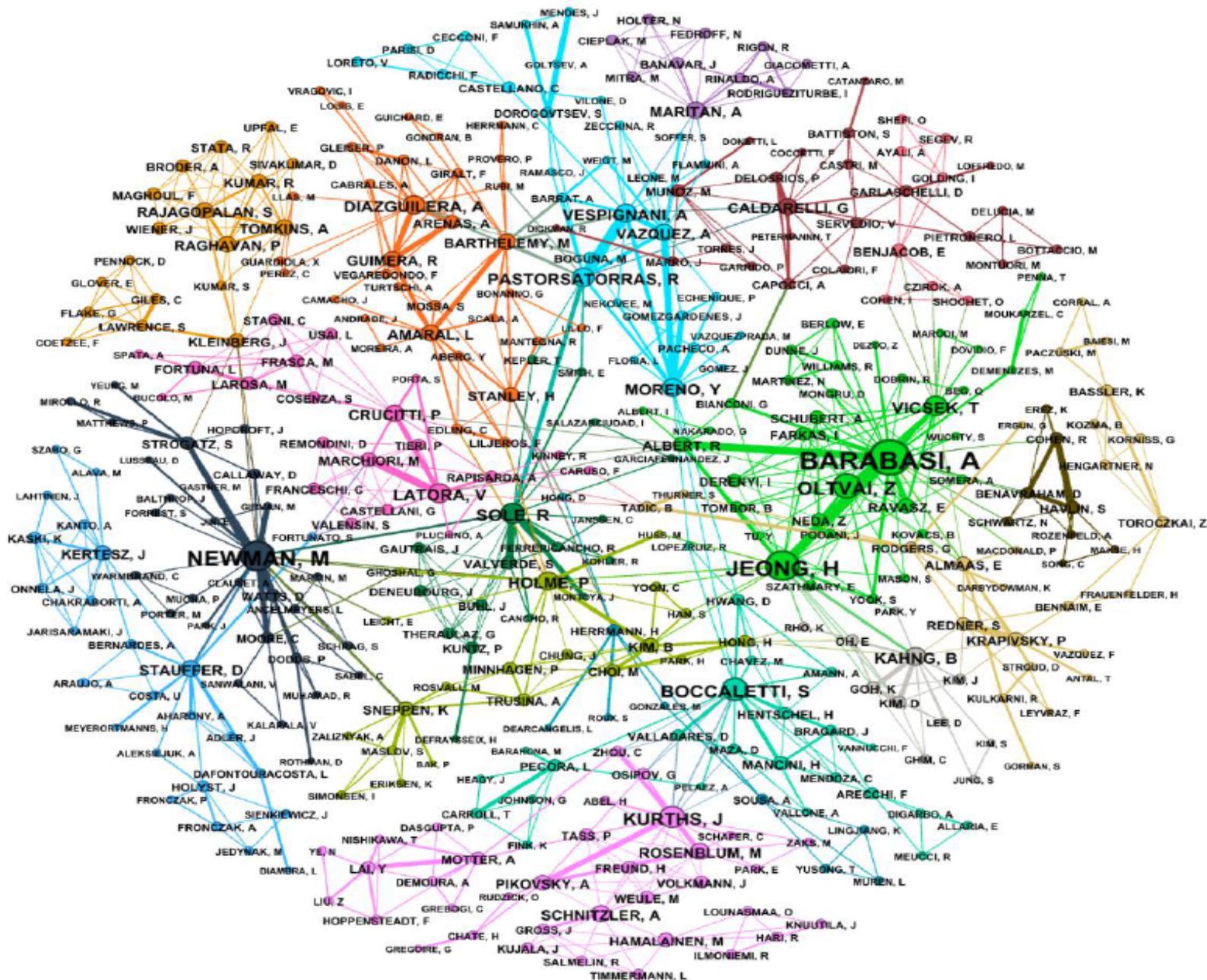
EPA Web Network shows the connectivity of websites that link to www.epa.gov.
Note log log scales and estimation of slope of the drop which defined gamma

Kousuke Tachida: network of fly (*D. melanogaster*) high-throughput Protein-Protein Interactions (PPI)



ER Random Network	BA Scale-free Network
	

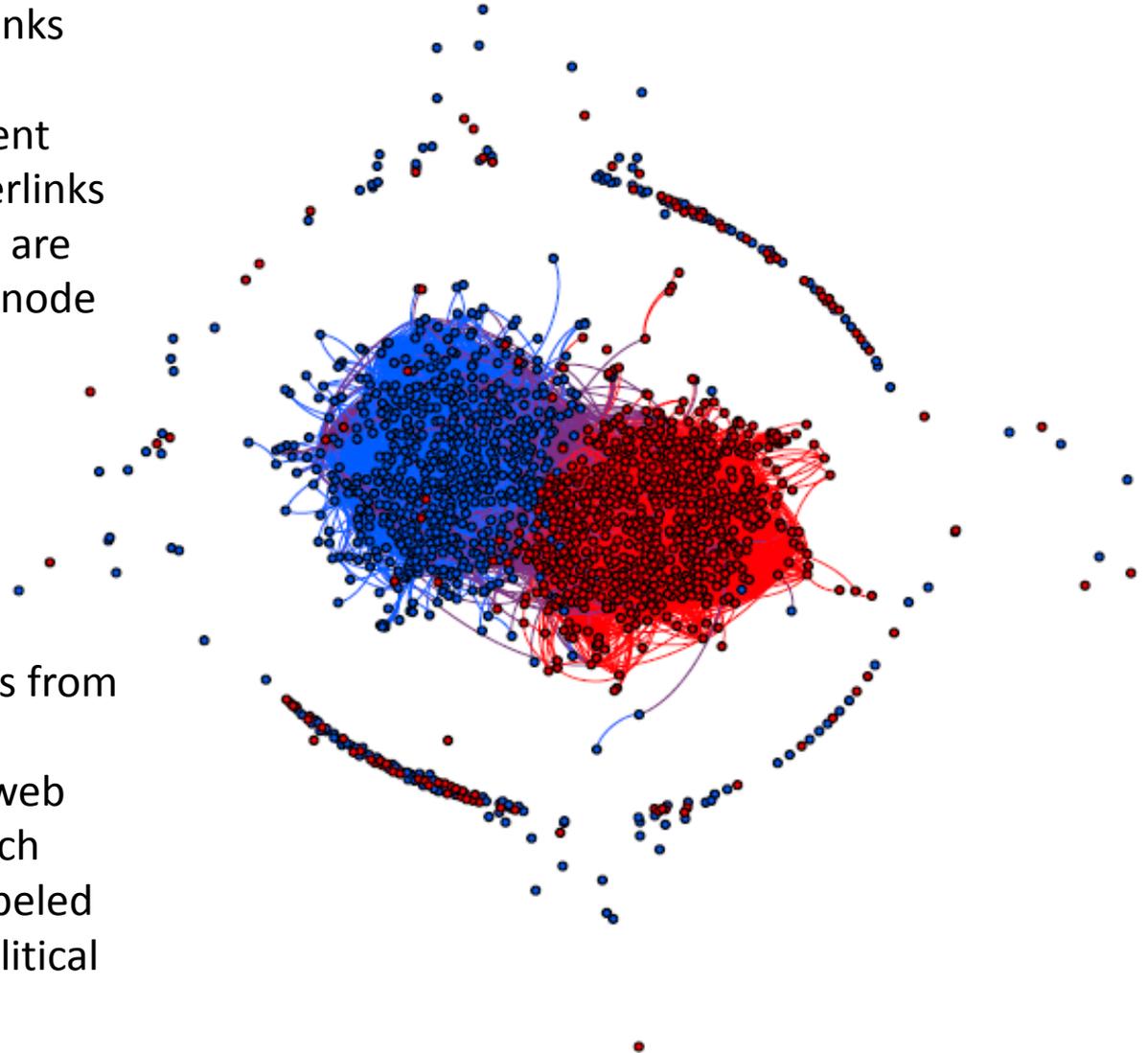
Kousuke Tachida: network science coauthorship



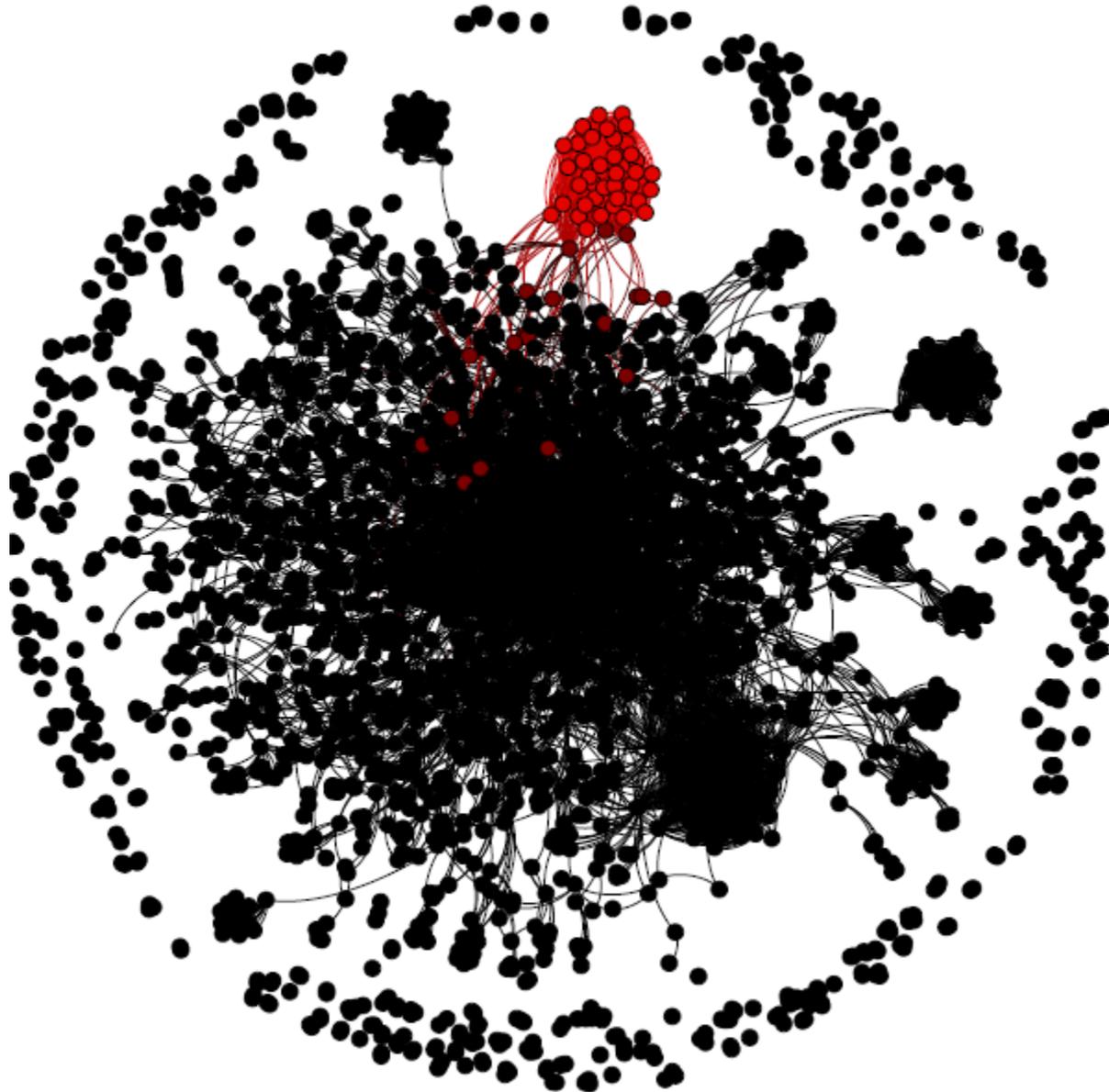
Tyler Shepherd: Political Blogs Network

This network represents hyperlinks between Internet blogs on U.S. politics. Nodes represent different blogs and edges represent hyperlinks from one blog to another. Edges are directed and unweighted. Each node has a value attribute indicating political leaning: 0 for liberal, 1 for conservative.

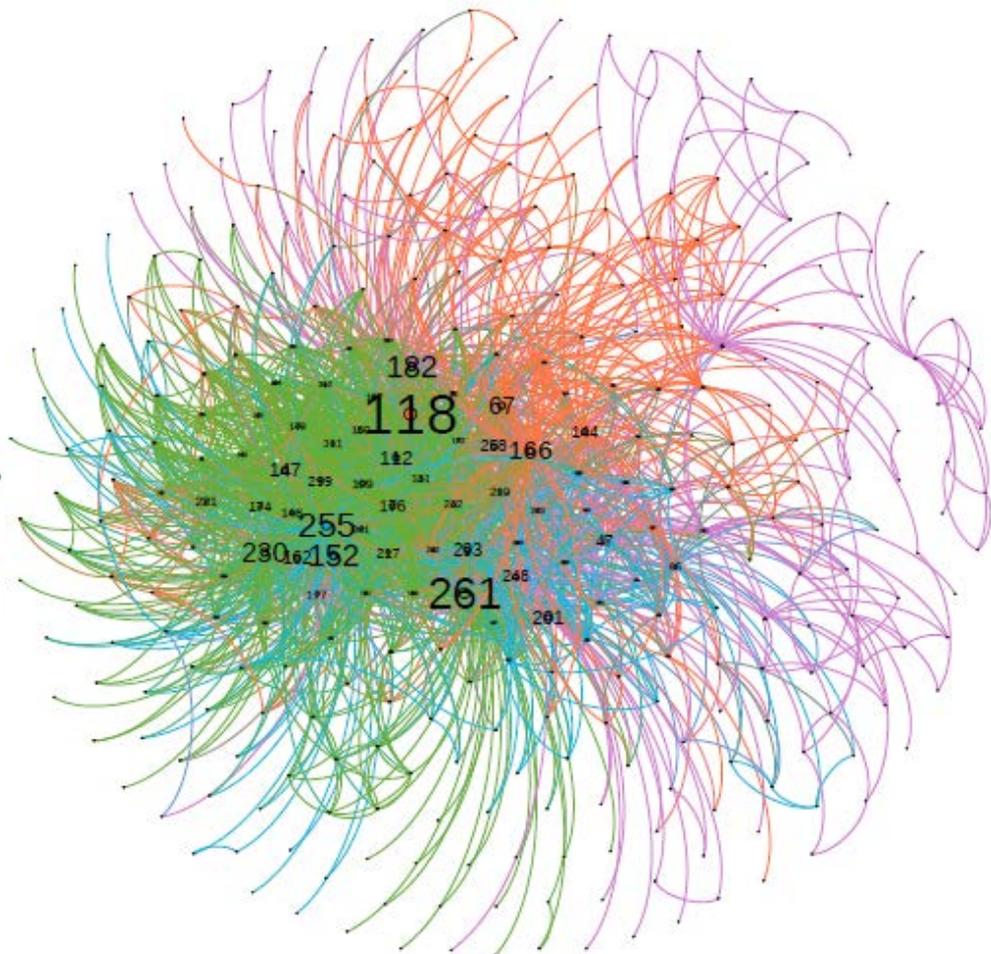
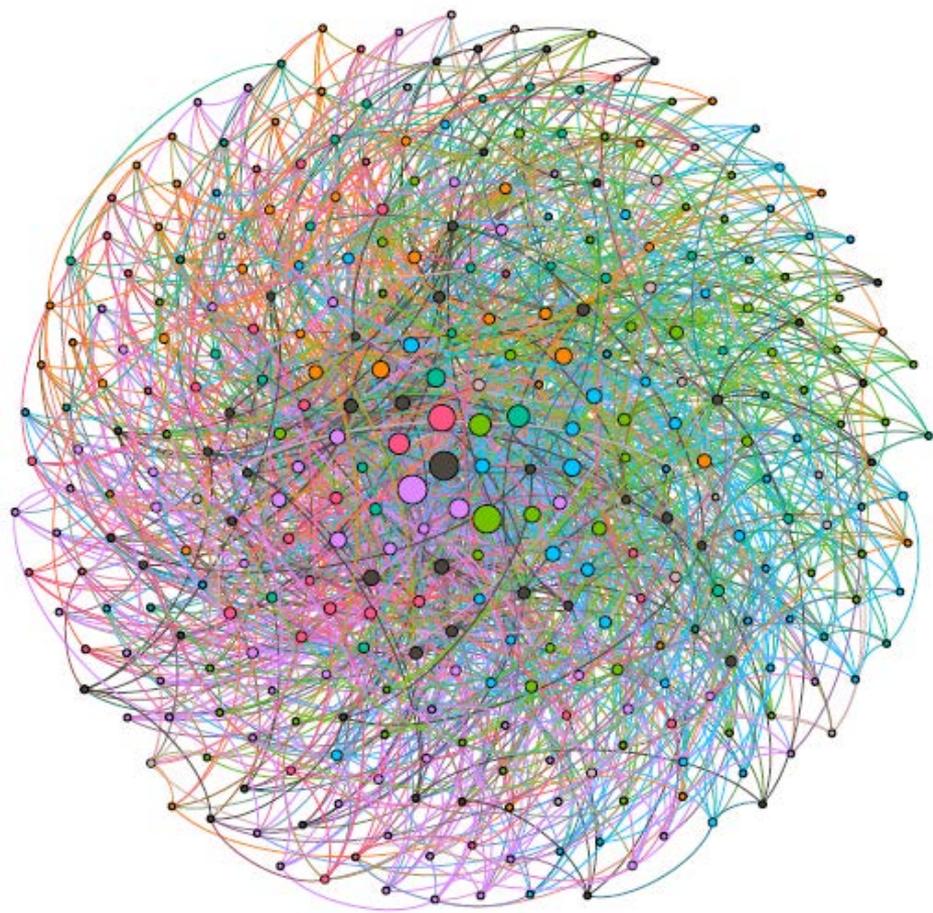
This political leaning data comes from self-reported blog directories. Hyperlinks were found using a web crawler on the homepage of each blog. Data was collected and labeled around the time of the 2004 political election.



Tyler Shepherd: General Relativity and Quantum Cosmology Collaboration Network

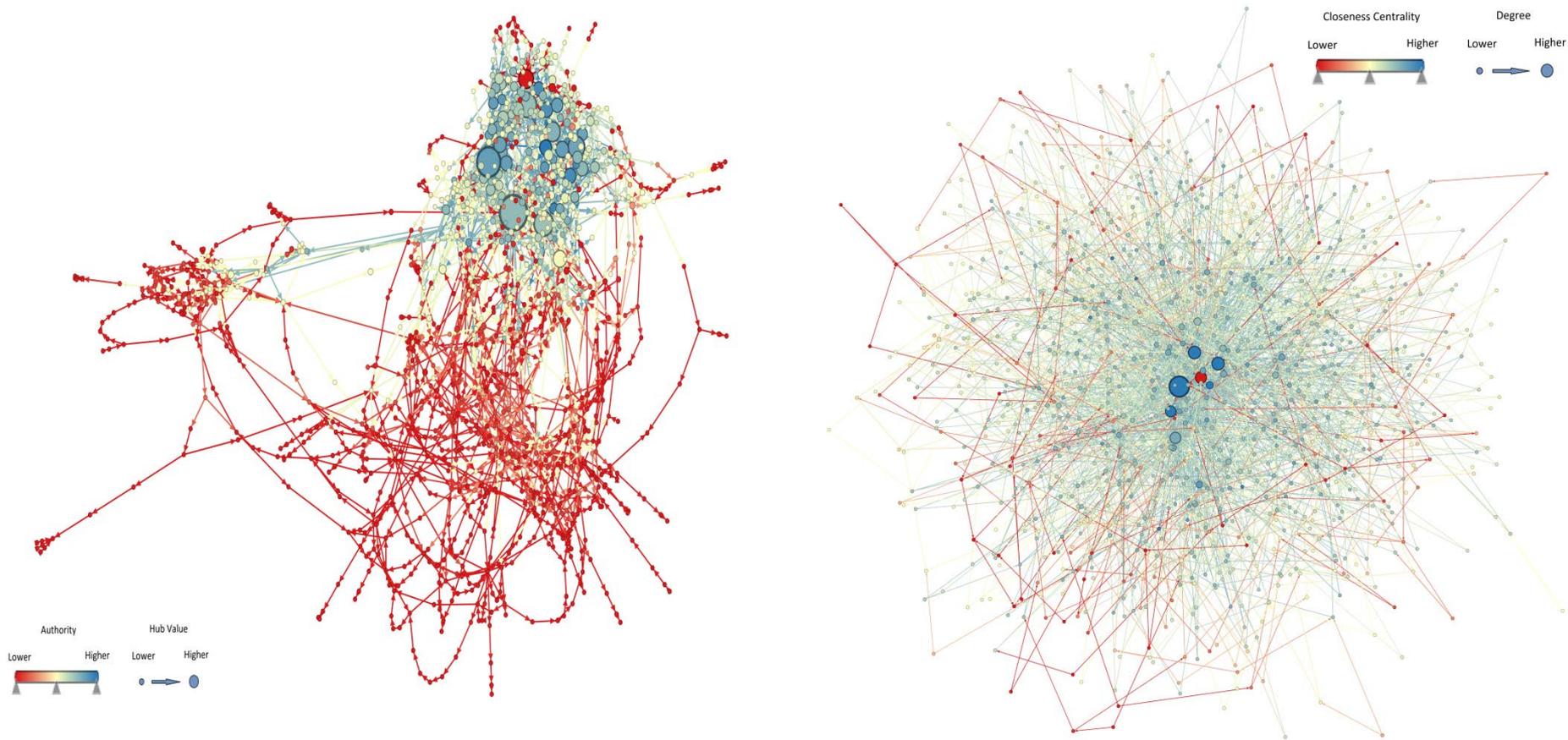


James Flaminio, using network visualization



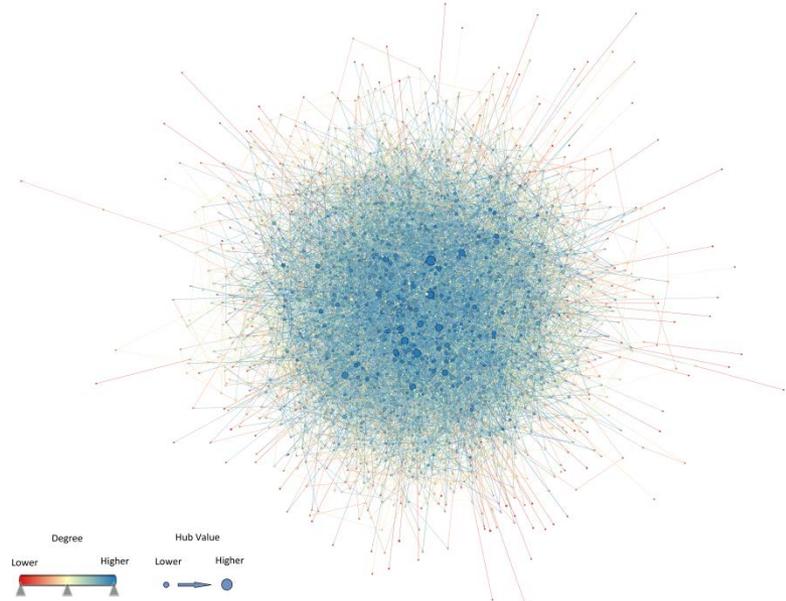
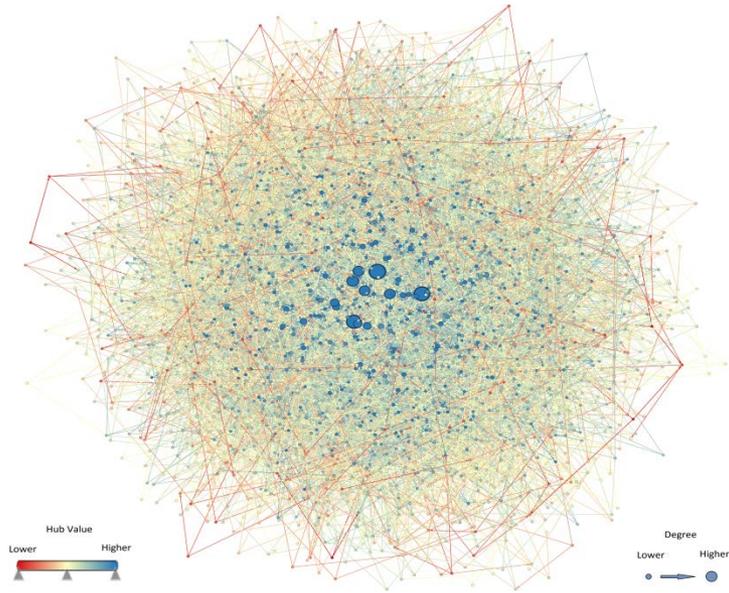
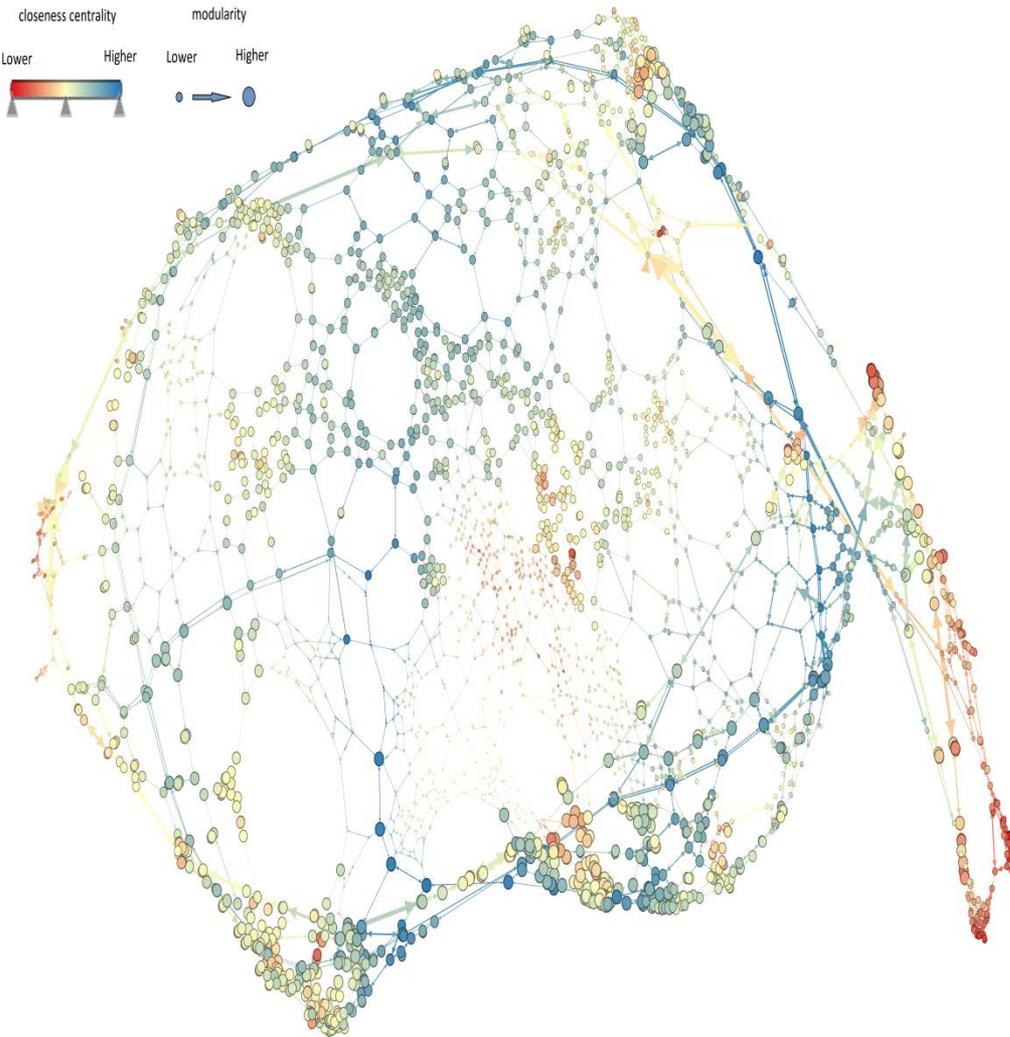
Network visualizations of the BA equivalent Usair (left) vs. the original Usair (right)

Logan Garber: Maayan FAA network



Comparing real-network with its BA model

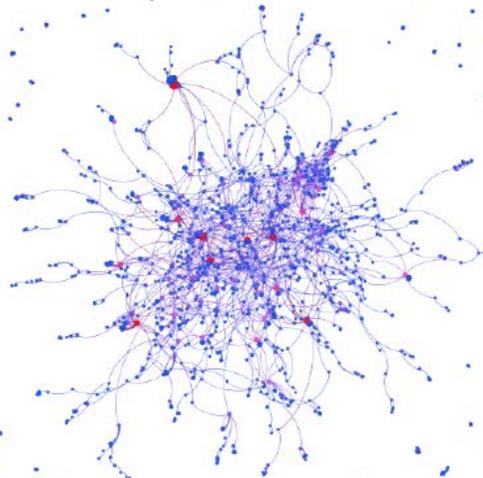
Logan Garber: Rome road network



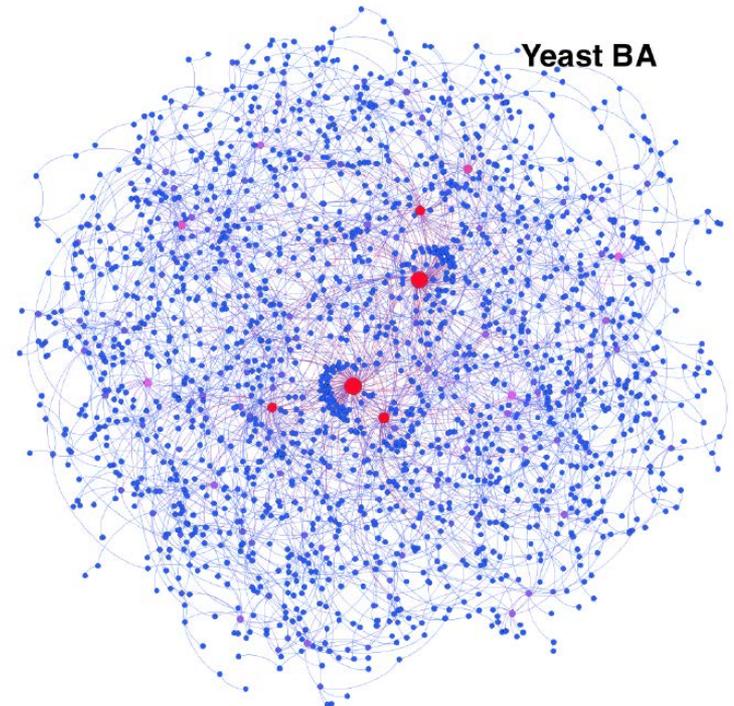
Comparing real-network with its BA (right upper corner) and ER (right lower corner) models

Christopher Jones: Yeast network

Yeast Real

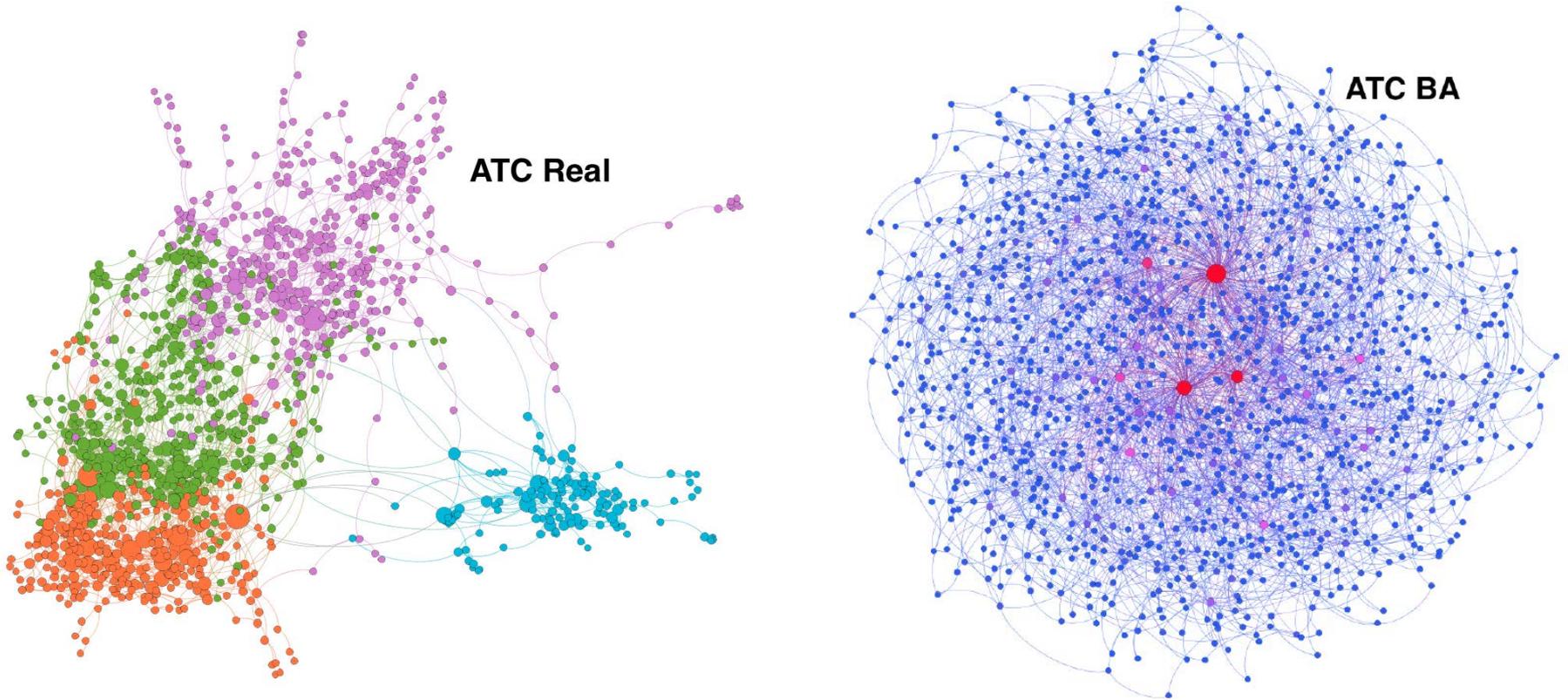


Yeast BA



Similarity and differences between real-network and its BA model

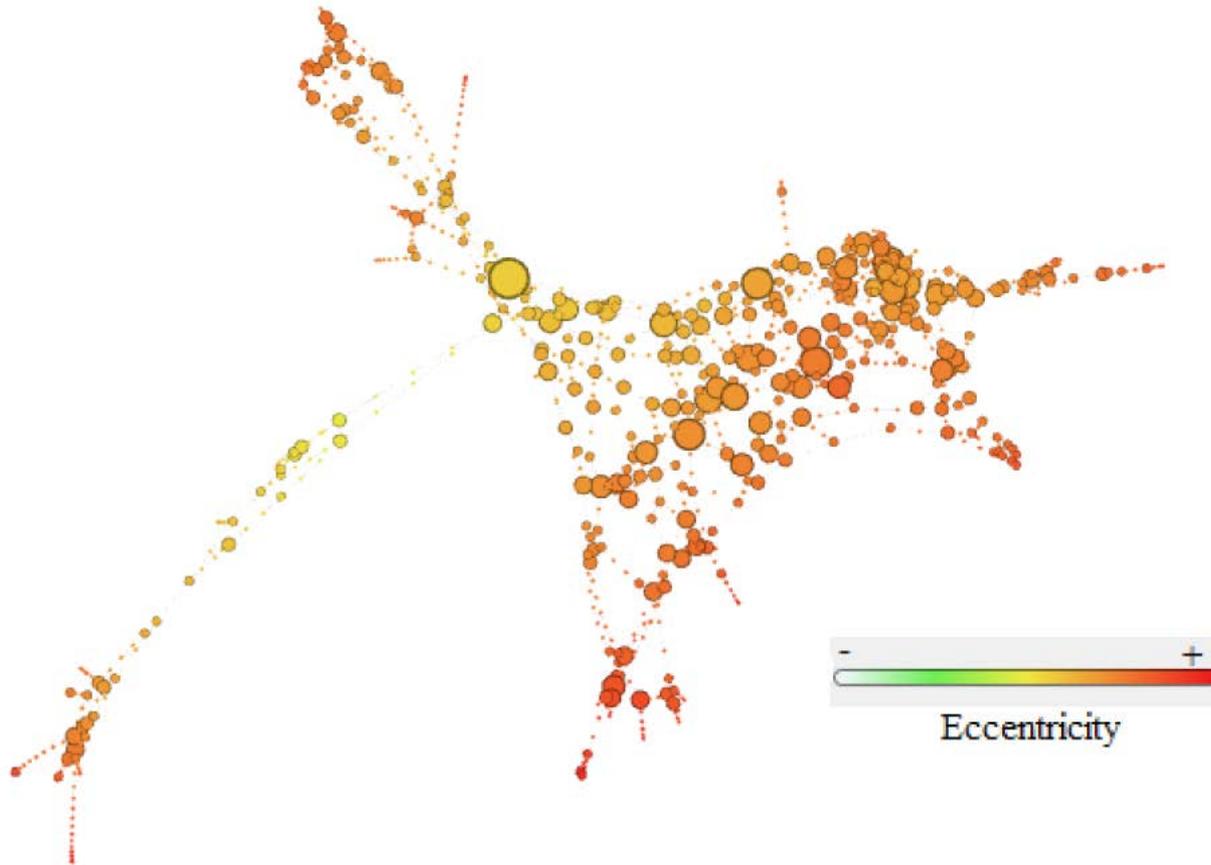
Christopher Jones: Air Traffic Control network



The differences between real-network embedded in space and its BA model

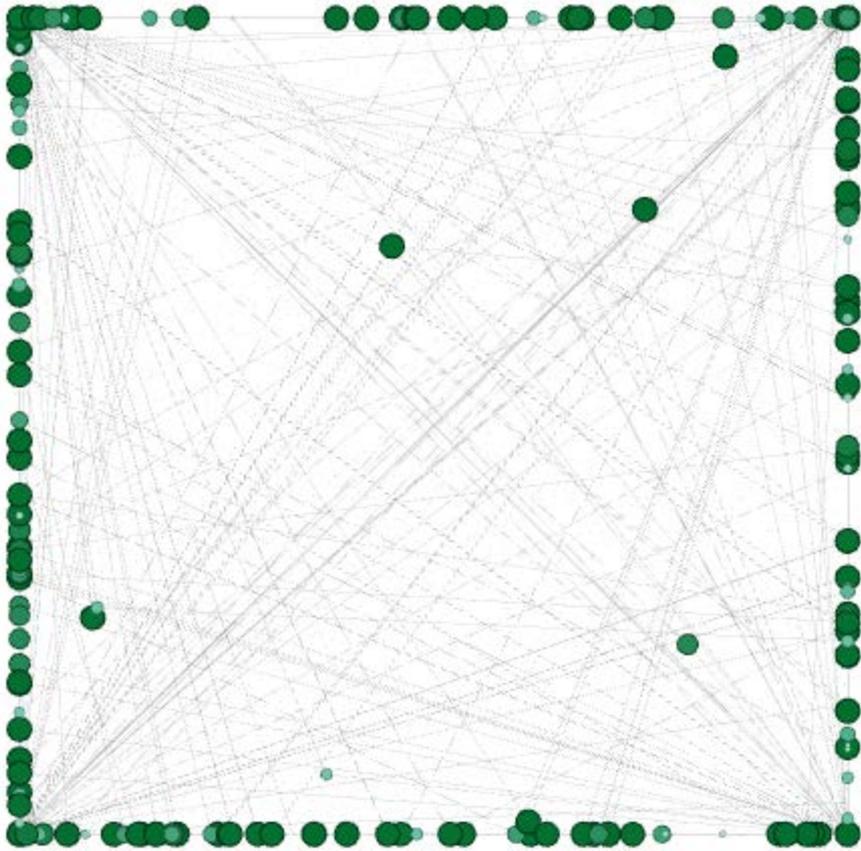
Rosemonde Ausseil: Euro road network

The Euro road network represents the international E-road network, in which the nodes are cities and the edges are roads. There is a central hub that has the highest degree and one of the lowest eccentricities but low (0) clustering coefficient. The more moderate hubs are all clustered together, away from the main hub. This means that there are many roads that go from the biggest city to the smaller cities. Yet, the medium-sized cities are more interconnected.



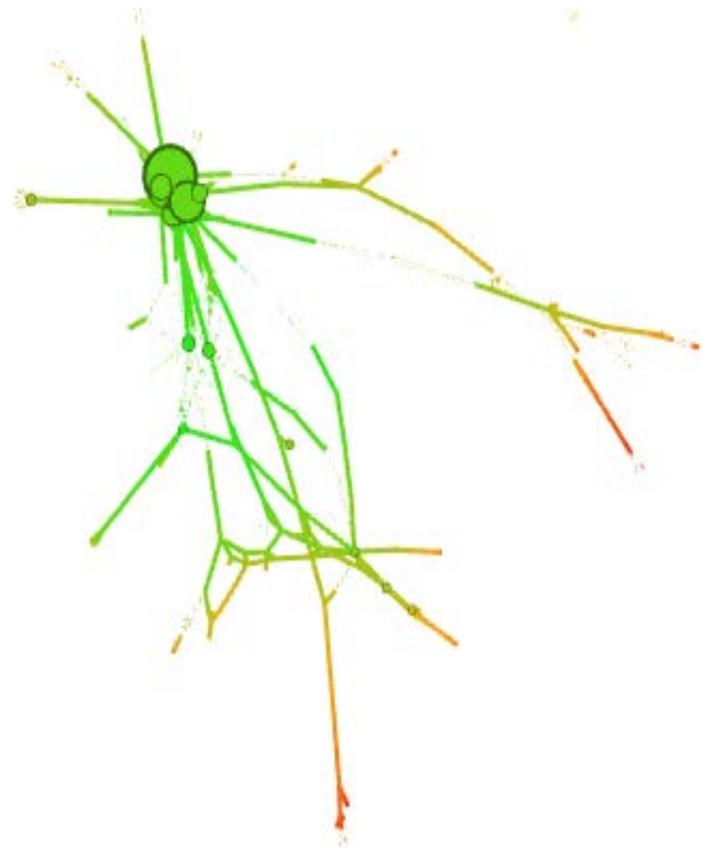
Rosemonde Ausseil: two bio networks

The Lung represents the coupled temperature and water vapor transport in a lung; there are no “important nodes” in the network, nodes are equivalent in terms of degree and eccentricity.



Lung Network Graphic Representation

The bio grid mouse network represents the protein-protein interactions in a mouse. Each node is a protein and an edge shows an interactions between them. All the hubs are clustered together



Bio grid mouse Graphic Representation

Angelina Martineau: Communication network

This network describes the email communication between members of the University Rovira I Virgili in Tarragona in the south of Catalonia, Spain. Nodes with a higher degree are colored blue and are larger. Nodes with lower degrees are red and smaller.

