Small-world Networks All Around

Most "natural evolved" networks are small world

- Network of actors → six degrees of Kevin Bacon
- Network of humans → Milgram's experiment
- Co-authorship network → "Erdos Number"
- World Wide Web, the Internet, …

Many of these networks also "grow incrementally"

"Preferential" model of growth

- When adding a vertex to graph, connect it to existing vertex v with probability proportional to num_neighbors(v)