

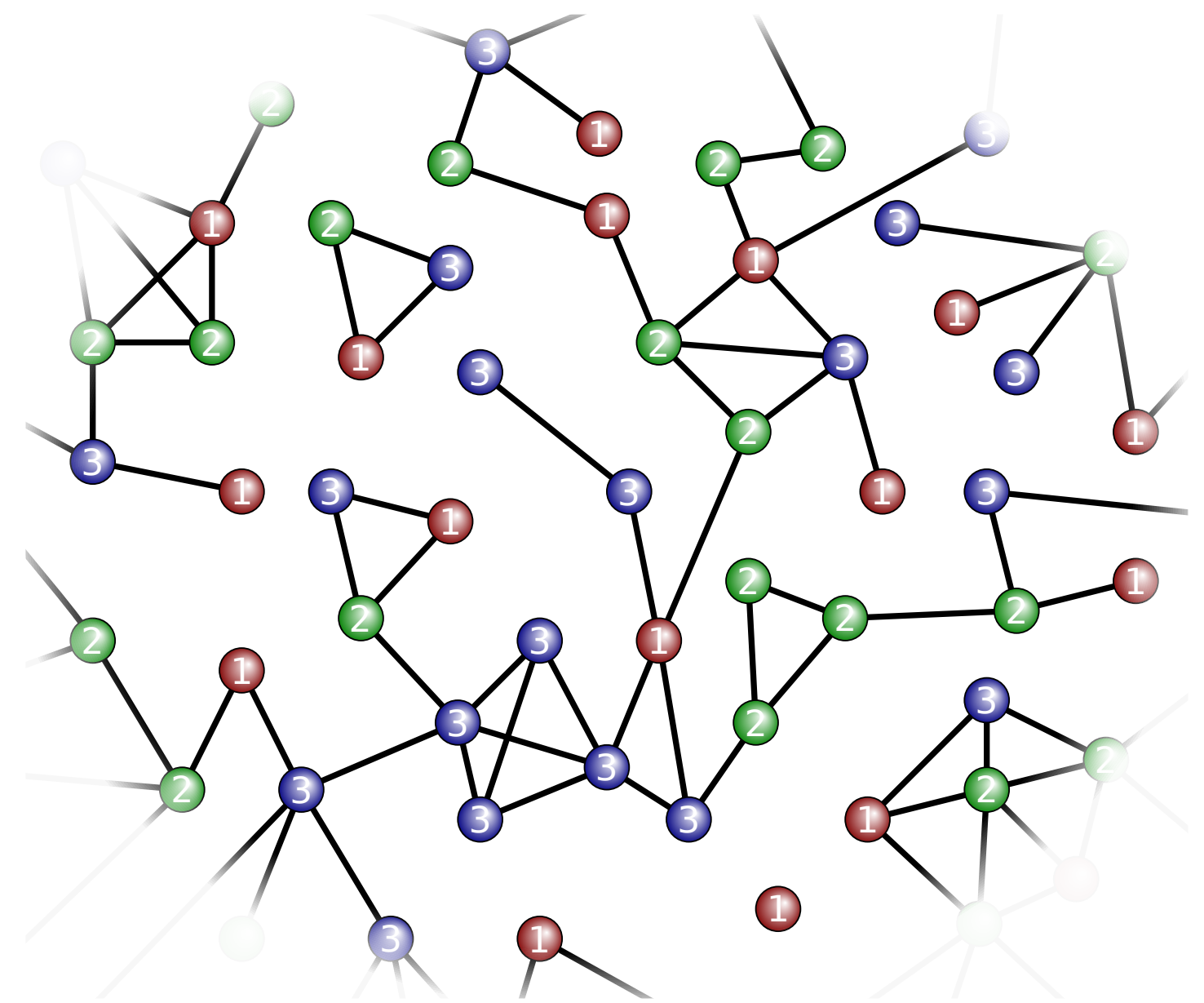
Outline

1. Are simple models enough to study complex systems/networks?

2. “Simple” ways to encode structural complexity

(a) latent metric space

(b) stub types



General *stub matching* scheme

Many network models can be seen as a *stub matching scheme* with

- ▷ node types
- ▷ stub types
- ▷ rules governing how stubs are matched

This perspective facilitates the *mathematical description* of the dynamical processes on networks

- ▷ probability generating functions (ex.: percolation, robustness)
- ▷ ordinary differential equations (ex.: epidemic spreading, opinion dynamics)

