

# Problems (contd.)

- Large number of *freeloaders*
  - 70% of users in 2000 were freeloaders
  - Only download files, never upload own files
- Flooding causes excessive traffic
  - Is there some way of maintaining meta-information about peers that leads to more intelligent routing?
    - ➔ Structured Peer-to-peer systems
    - e.g., Chord System (coming up next lecture)