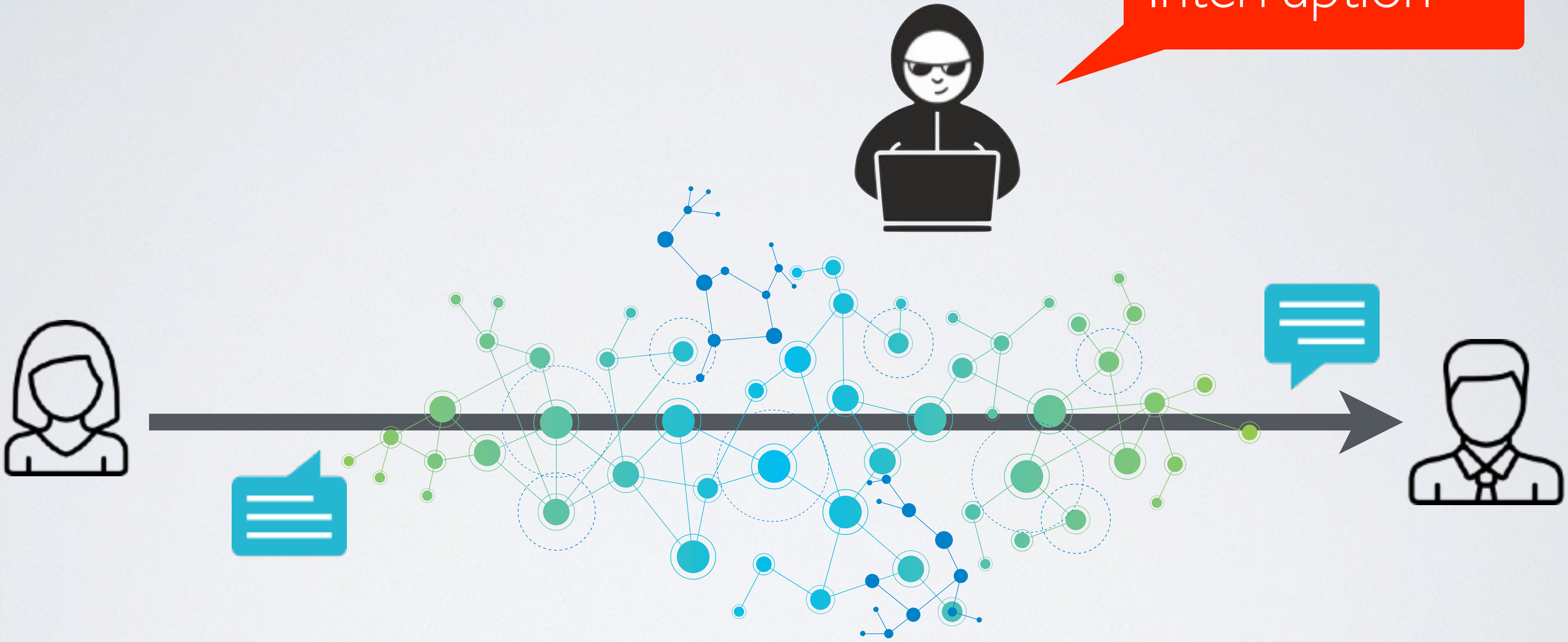
# Security goals vs attacker's model

Interception
Modification
Fabrication
Interruption



Let us consider **confidentiality, integrity ~~and availability~~**

# Design of a cryptography protocol

The hypothesis on the system

- **What is the network model?**
  bandwidth, latency, reliability, message ordering, synchronous vs asynchronous
- **What trusted setup is assumed?**
  pre-shared keys, key generation
- **How powerful are the parties vs. attacker?**
  computing power, source of randomness
- **Which adversary model is considered?**
  outsider vs insider, passive vs active, man-in-the-middle, man-at-the-end, corruption
- **What kinds of failures are tolerated?**
  crash faults, byzantine faults
- **What exact security properties are being claimed?**
  confidentiality, integrity, authentication, non-repudiation, forward secrecy