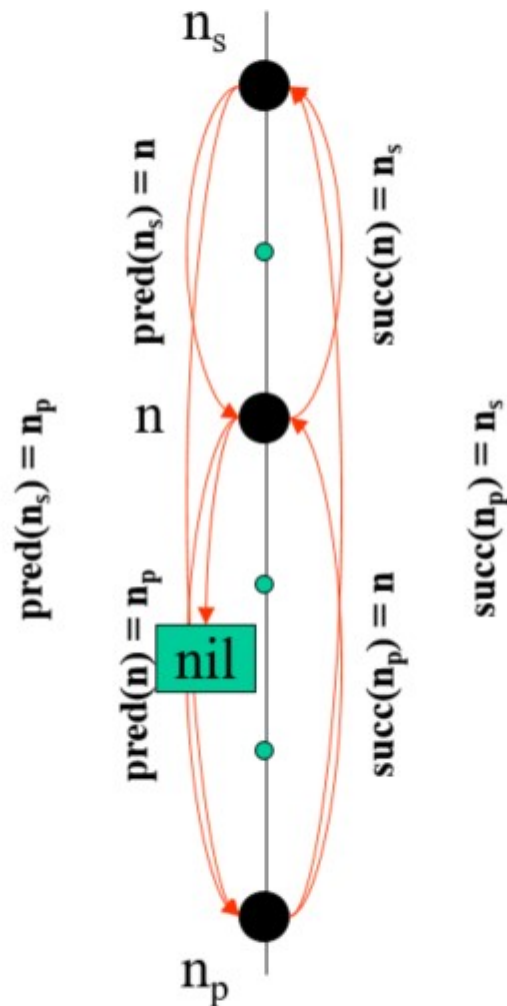# 1. Building ring + Stabilization

- **n joins**
  - predecessor = nil
  - n repeats the following stabilization procedure until it acquires n_s as successor

1. **n runs stabilize(Succ)**
   - n sends {request,self()} to n_s
   - n_s responds {status, n_p} to n

2. **n runs stabilize(Pred, MyKey, Succ)**
   a) n confirms n_s as successor and notifies n_s that it is its new predecessor
      - n sends {notify,n} to n_s
   b) n updates its successor and stabilizes again

3. **n_s runs notify(New, MyKey, Pred)**
   - n_s checks and acquires n as its predecessor

- **n_p also runs stabilization procedure**
  - n_p asks n_s for its predecessor (now n)
  - n_p acquires n as its successor
  - n_p notifies n that it is its new predecessor
  - n acquires n_p as its predecessor