







## Initialization

1. Assign tokens uniformly to processors 
2. Randomly initialize restaurants on each processor:
  - ||| - table assignments (uniform)
  - ||| - dishes (uniform)
3. Update base H with initial dish counts 
4. Resample H

## Until convergence


1. Send the new sampled H to processors 
2. Resample restaurants on each processor:
  - ||| - table assignments (CRP)
  - ||| - dishes  $\sim H$
3. Update base H with new dish counts 
4. Resample H

Occasionally:

1. Collect tables from all processors 
2. Do Metropolis-Hastings step to reassign tables
3. Send grouped tables to their assigned processors 

### Legend

Message passing

- to slaves 

- to master 

Global step

||| Local step (parallel)