

# Other Inference Variations

- **Parallelization: AD-LDA** [Newman et al. 09]
  - **Idea:** Distribute documents across cores (or machines)
    - locally maintain “differences” instead of updating globally shared counts
    - Resolve these “differences” once all documents have been sampled
    - Can be used for both CGS and CVB/CVB0
- **Online learning: Stochastic Variational Inference** [Hoffman et al. 13]
  - **Idea:** Learn LDA models on streaming data (learned Wikipedia topic model with low resource usage)
  - Stochastic Collapsed VI also possible [Foulds et al. 13]