# Scheduling BoF

#### Problems

- Accelerating batch completion
- Adaptive replication wrt errors
- Making apps that use random seed reproducible
- Long-running jobs

# Batch Completion

- Problem
  - Delays due to job distribution
  - Delays due to job error/failures

### Proposed Solutions

- Adapt depending during lifecycle of batch of jobs
  - More replication (angers volunteers)
  - More predictable, faster hosts
  - Dynamically divide work units
- Client strategies
  - Flag and increase priority of job on client
  - Workunit score to indicate potential to be delayed on client (factors: "new host", last connect time, availability logs, fraction done, current workload, surpassing of est\_runtime)

# Adaptive replication

 Questions about how it works wrt hosts with errors (documentation)

# Long-runnings jobs

- Job takes I month to complete
  - Want it to run continuously via migration
- Solution
  - message\_from\_host file to send the state file, indicating how far along it is in the computation
  - have optional download file to use this state file