

What is threadpool?

- A parallel programming backend for R
- Resource allocation is done with a *thread pool*
- Particular instance of a tuple space implementation
- Underlying data structures use on-disk queues
- Under-underlying database is LMDB: Lightweight; can do transactions with blocking

threadpool Features

- **Dynamic resource allocation:** The pool of compute resources can grow or shrink over time
- **Automatic load balancing:** Large tasks (or slow resources) do not hold up processing of other tasks
- **Restartability / Persistence:** Jobs can be stopped and pick up where they left off
- **Dynamic job resizing:** Tasks can be added to jobs without having to start from the beginning