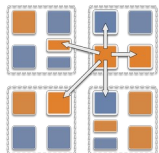


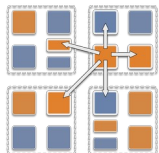
More Information

- <http://charm.cs.illinois.edu>
 - Papers, downloads, manuals, tools
- Mailing list: charm@lists.cs.illinois.edu
 - <https://lists.cs.illinois.edu/lists/info/charm>
- <http://charmplusplus.org>
 - Tutorial material, mini apps, ...
 - A series of programming exercises designed to teach basic concepts in Charm++
 - <http://charmplusplus.org/exercises/>
- <http://charmplusplus.com>
 - Charmworks Inc., supporting Charm++



Day 2 and beyond: Advanced Concepts

- Projections: Performance Analysis and Visualization, really nice, and a workhorse tool for Charm++ developers
- Application Design case studies
- Threaded entry methods, Futures, ...
- Libraries and Modules (Modularization): bound arrays, callbacks
- Priorities
- Entry method attributes
- Quiescence detection
- LiveViz: visualization from a parallel program
- CharmDebug: a powerful debugging tool
- Messages (instead of marshalled parameters)



Advanced Concepts continued

- Processor-aware constructs:
 - Groups: like a non-migratable chare array with one element on each “core”
 - Nodegroups: one element on each process
- Within node parallelism: CkLoop(), taskQueue, nodeGroup
- Using GPGPUs: HAPI: async interface, using streams effectively, ..
- Sections

