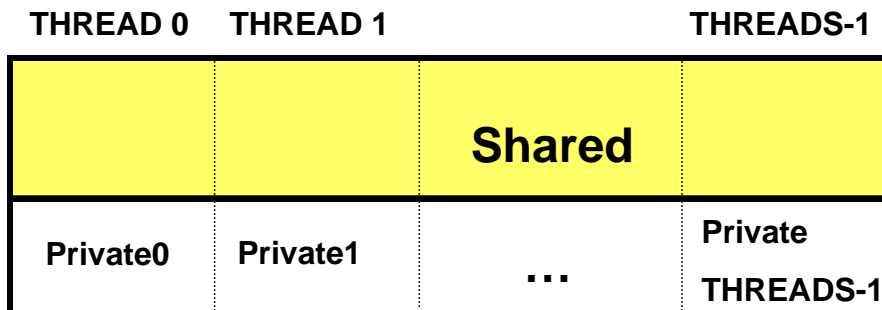


Programming Model

- SPMD Execution model
 - Barriers, Locks, Broadcast

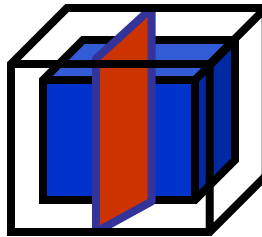


Implementation

- Available on most platforms
 - Uses GASNet comm layer
 - Source-to-source (C), no JVM
- Optimizing compiler
 - Loops, comm, memory model
- Performance tools
 - GASNet trace, statistical model

Language Features

- Multi-dimensional arrays
- Checked global synchronization
- Immutable (“value”) classes
- Operator overloading
- Region based memory management



Applications

- Heart simulation
 - Scalability up to 128 processors
- Adaptive mesh refinement
 - Performance \approx C++/F/MPI
 - 1/5th the line count
- NAS parallel benchmarks

Source: www.psc.org

