

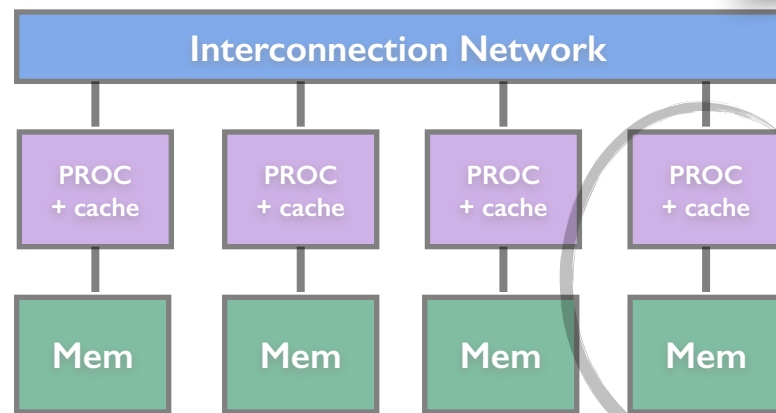
Default is parallel (SPMD): what is my data and what do I need from others?

Sockets
MPI
MapReduce

snow
Rmpi
Rhpc
pbdMPI

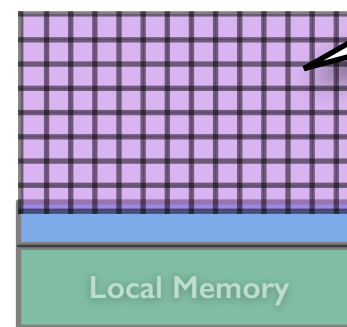
RHadoop
SparkR

Distributed Memory



Offload data and tasks.
We are slow but many!

Co-Processor



GPU: Graphical Processing Unit
MIC: Many Integrated Core

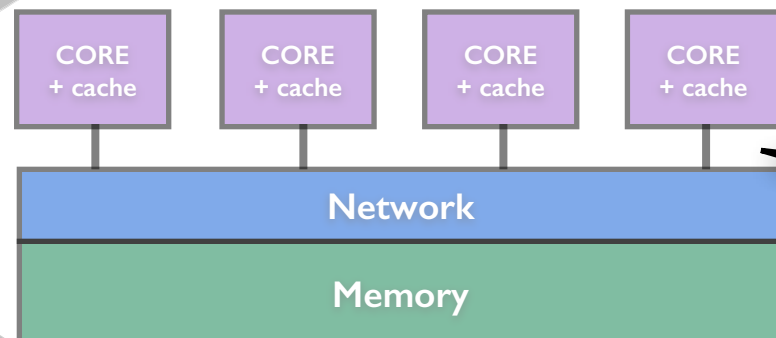
CUDA
OpenCL
OpenACC
OpenMP
Pthreads

fork

Foreign
Language
Interfaces:
.C
.Call
Rcpp
OpenCL
inline
.
.
.

Default is serial: which tasks can
the compiler make parallel?

Shared Memory



snow + multicore = parallel



multicore