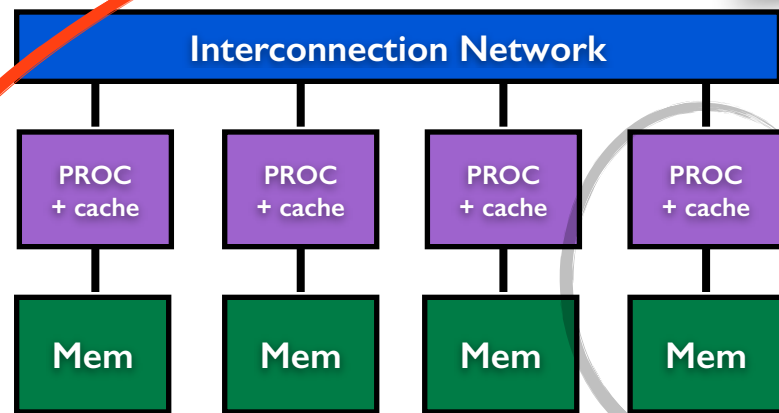


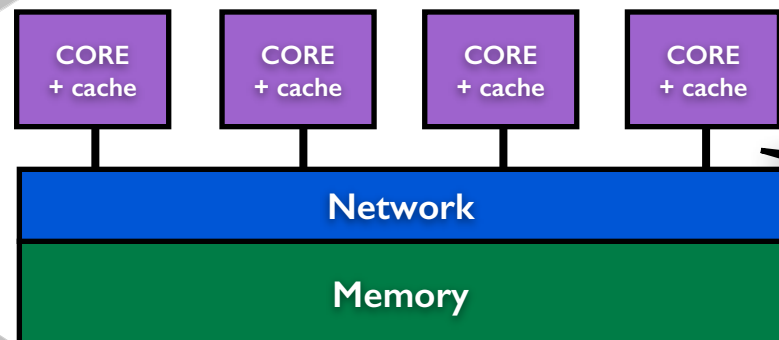
Distributed Memory



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

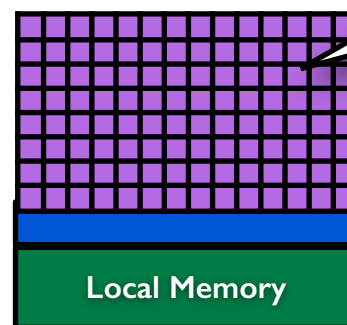
Sockets
MPI
Hadoop

Shared Memory



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

Co-Processor



GPU: Graphical Processing Unit
MIC: Many Integrated Core

Offload data and tasks.
We are slow but many!

CUDA
OpenCL
OpenACC
OpenMP
Pthreads

fork