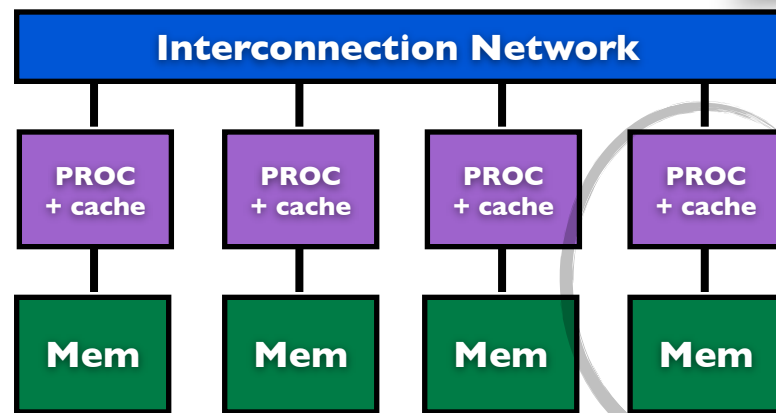


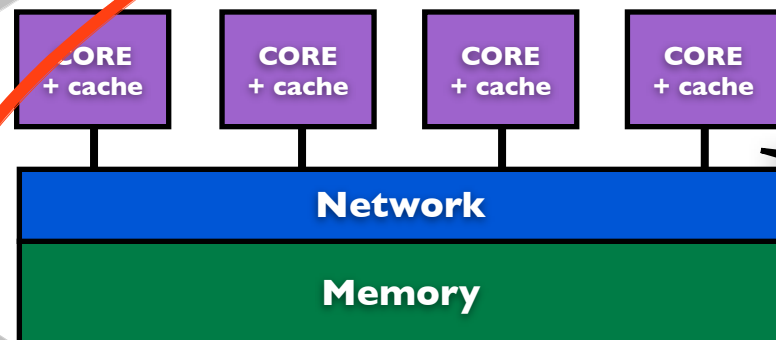
Sockets
MPI
Hadoop

Default is parallel (SPMD): where is my data and who has what I need?

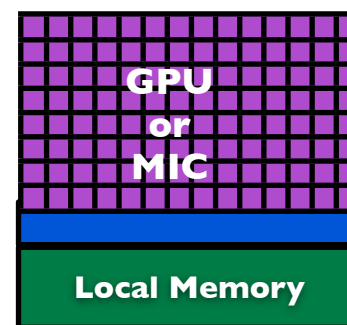
Distributed Memory



Shared Memory



Co-Processor



Offload data and tasks. We are slow but many!

CUDA
OpenCL
OpenACC

GPU: Graphical Processing Unit
MIC: Many Integrated Core

OpenMP
OpenACC

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

OpenMP
Pthreads
fork