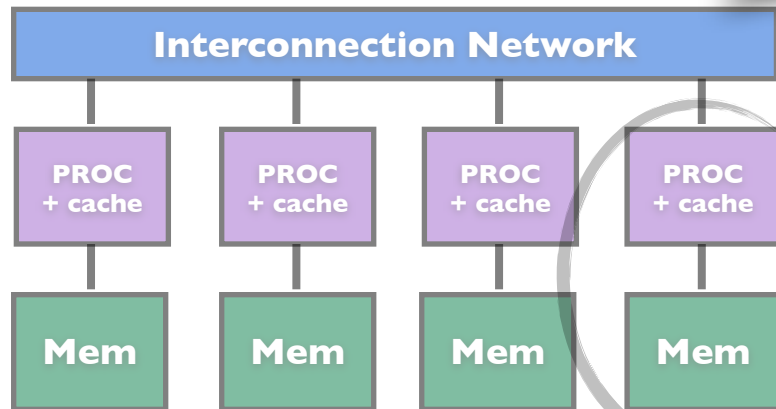
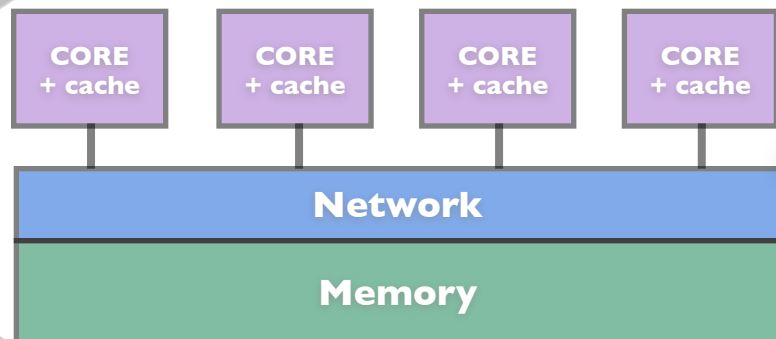


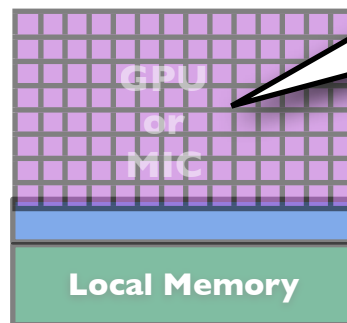
Distributed Memory



Shared Memory



Co-Processor



GPU: Graphical Processing Unit
MIC: Many Integrated Core

Focus on which tasks can be parallel



snow + multicore = parallel



snow
Rmpi
pbdMPI

Focus on who owns what data and what communication is needed

Sockets
MPI
Hadoop



RHIPE



LAPACK
BLAS

ScaLAPACK
PBLAS
BLACS

PETSc

Trilinos

pbdDMAT



magma

CUBLAS

MAGMA

MKL
ACML
LibSci

DPLASMA

PLASMA

CUDA
OpenCL
OpenACC

.C
.Call
Rcpp
OpenCL
inline

OpenMP
OpenACC

OpenMP
Threads
fork

multicore
(fork)

HiPLARM