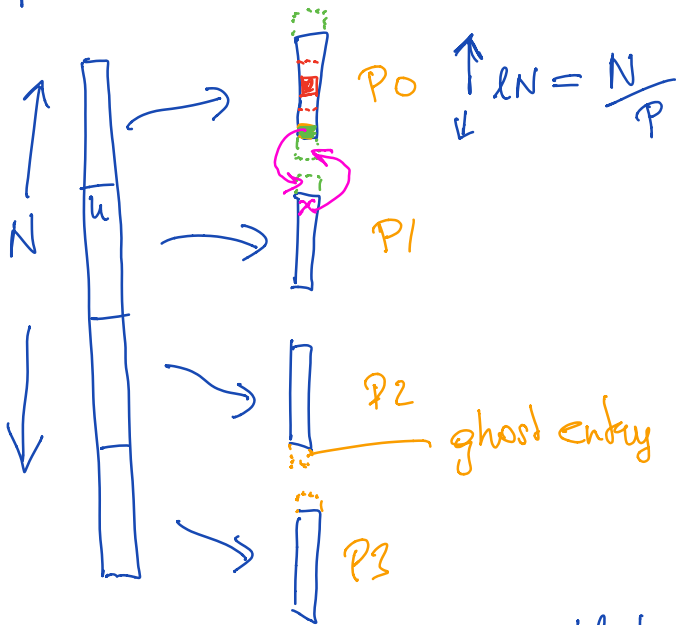


parallel version of 1D Jacobi



$p = \# \text{ processes}$

in each iteration

1.) communicate ghost values

2.) new Jacobi update (local)

repeat

nonblocking version:

1.) start communicating ghost values, `isend` `irecv`

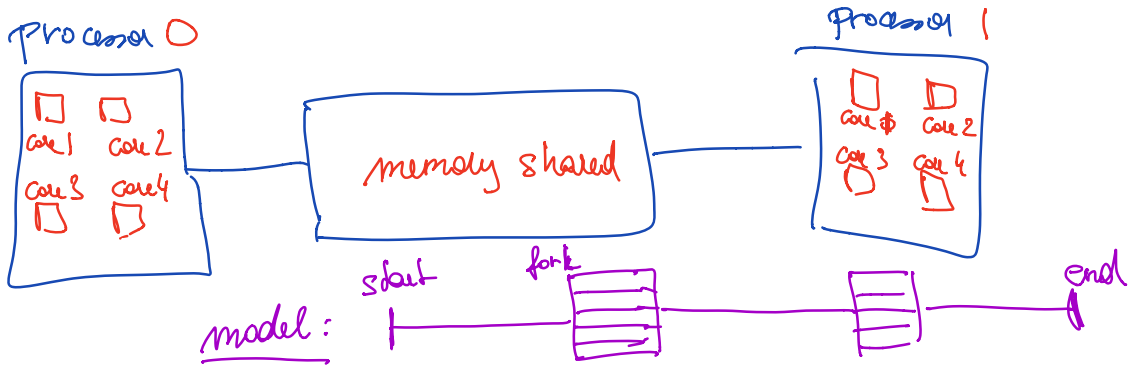
2.) new interior Jacobi updates (local), does not require ghost values

3.) finish communication (`MPI_Wait`)

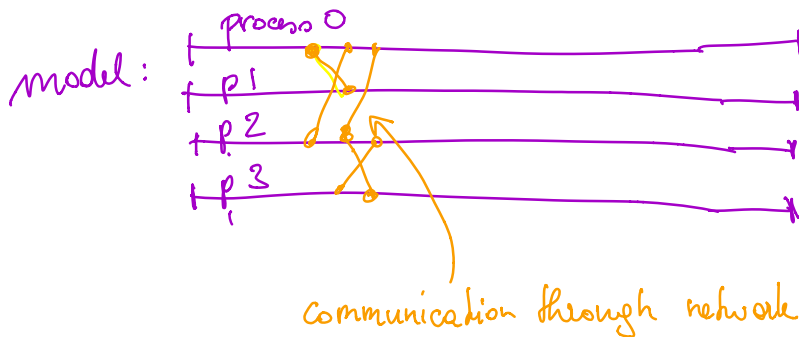
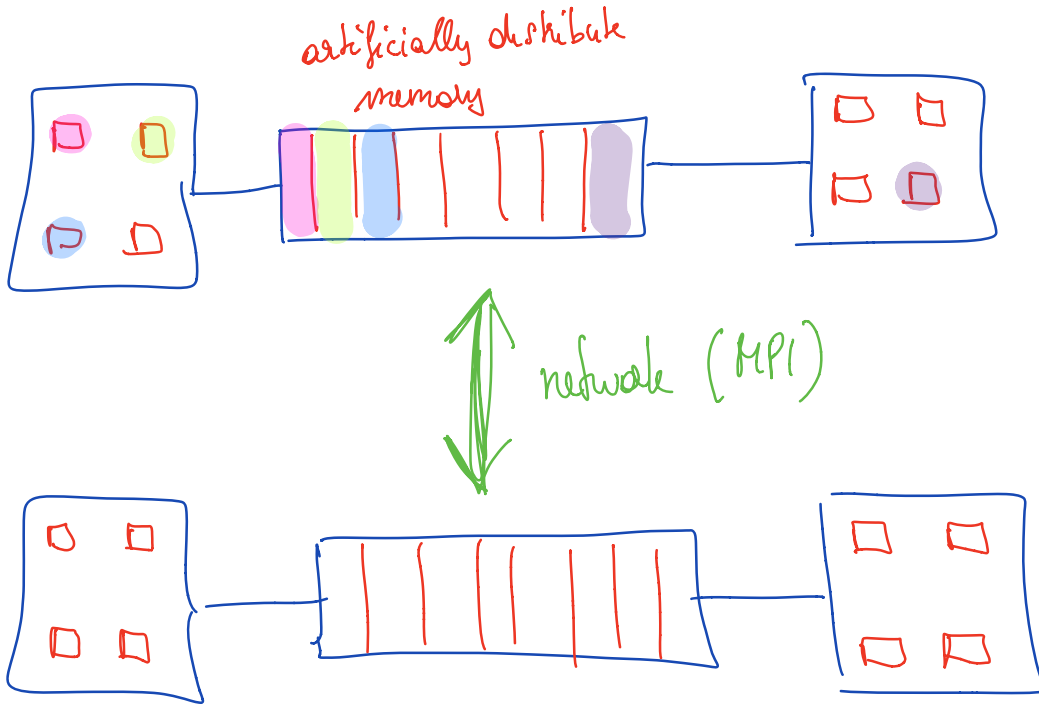
4.) update 2 remaining entries. (first & last)

INTERLEAF
COMMUNICATION
WITH
COMPUTATION

Shared memory parallel computing - OpenMP



Distributed memory parallel - MPI (same node)



Hybrid model:

