Lecture Notes: Feb 15, 2011

## Collective routines

- mpi\_barrier
- mpi\_bcast (called identically on all processors)
- mpi\_gather (gathers data from all procs in comm and stores it into the recv buffer on the root proc)
- mpi\_all\_gather (use instead of mpi\_gather -; mpi\_bcast)
- mpi\_all\_gatherV (no root)
- mpi\_scatter (send columns of matrix to processors, inverse of gather)
- mpi\_scatterV (inverse of gatherV)
- mpi\_alltoall (sendbuf, sendcount, datatype, recvbuf recvcount, recvtype, comm, error)
- $\bullet$  mpi\_alltoallV
- $\bullet$ mpi\_reduce