## Lecture Notes: Mar 10, 2011

## MPI Derived Data Types

Sending data not contiguous in memory

## Constructors

- mpi\_type\_dup
- mpi\_type\_contiguous(count, oldtype, newtype, ierror)
- mpi\_type\_vector(count, blocklength, stride, oldtype, newtype, ierror); using blocklength=2 does not send two rows
- mpi\_type\_hvector; deprecated, don't use
- mpi\_type\_create\_hvector; probably will never use
- mpi\_type\_indexed(count, arrayOfBlockLengths, arrayOfDisplacements, oldtype, newtype, ierror)
- mpi\_type\_indexed\_block
- mpi\_type\_hindexed
- mpi\_type\_create\_struct(count, arrayOfBlockLengths, arrayOfDisplacements, arrayOfTypes, newtype, oldtype, ierror)

## Schedule

Week before finals...

- 1. Tuesday: written final exam
- 2. Thursday: start semester project presentations (20 minutes each)

We will have more presentations Friday and maybe Monday of finals week. The written portion is due Wednesday at 5pm in 217 Durham.