

ACM40660/PH504 Practical 10

ICHEC

2022/23 Spring



1 Derived datatypes

Create derived datatypes which help one pass around a matrix column, matrix row and a sub matrix. The code will contain:

- 1. Use dynamic allocation for your original matrix. In C be careful how you allocate the matrix. You need a contiguous block of memory for it. The file alloc2d.h has a way to do this.
- 2. In order to create a new type for each of the three situations. (use MPI_Type_vector)
- 3. Write a ping-pong program but use the derived data types as the message.