

Practical MPI

Matrix Multiply

Login to MareNostrum with your student account and find the source files in the mxm folder.

Copy the files to your student accounts, compile the program and submit it to the execution queue.

- `cp /home/nct00...`
- `make`
- `bsub < submit-mpi.sh`

View the output files for messages from the batch system and the actual output from your program.

Try to run the application on various numbers of CPUs.

Define a reasonable matrix size in the source file and keep it fixed while experimenting with different numbers of processors in the submission file. How is the speedup behaving? At what

point does the computation start to take longer when more processors are used?

The MareNostrum Userguide can be downloaded at

<http://www.bsc.es/support/MareNostrum3-ug.pdf>