

HPC home work

Write an MPI programme, and associated Makefile, that can run on cosma, that does the following.

- Assign a different value to a real variable A for each process.
- Each processor should request the value of A for all other processors on a pair-wise basis, and add the received value to obtain the sum $\sum_i A_i$ for all processors
- Write the value each Task obtains to the screen
- Compare the values obtained to performing the same global operation using `MPI_REDUCE`

Provide the code, Makefile, and output. You can programme in either C or Fortran.