MPI Assignment Report

High Performance Computing Course – Riccardo Caprile (43707074)

**INFN Cluster Specifics**

* **CPU :** Intel(R) Xeon Phi(TM) CPU 7210 @ 1.30 GHz
* **Architecture :** x86\_64
* **Cores :** 64
* **Threads per core :**  4 ( 256 threads total)

**How to run the program using MPI**

* mpiicc pi\_homerwork\_parallel .c -o pi\_homework\_parallel
* mpiexec -hostfile machinefile.txt -perhost 32 -np 256 ./pi\_homework\_parallel , otherwise if the string before does not works: mpiexec -np 256 ./pi\_homework\_parallel

**Code Analysis**

**Conclusions**

Serial 1319.64 srconds  
Parallel with MPI : 12.46 seconds