

## **Loriano Storchi**

### **Hands-on Parallel Computing**

The main scope of the hands-on session is to apply what you have learned during the morning session to a couple of practical and easy examples. Practically we will firstly compile and install an MPI version and afterwards we will test our knowledge of MPI using some simple exercises. The main goal is to learn the main aspect of the parallel programming using the Message Passing paradigm. Firstly we will use a typical embarrassingly parallel problem such as the Calculation of Pi Using the Monte Carlo Method to explore, the parallel implementation will be guided using a pseudo code. Secondly we will try to introduce some of the basic concepts of the MPI communication complexity by implementing a classical global communication as the Broadcast . All the source codes may be also download via the following github repo:

<https://github.com/lstorchi/mpisttest>