

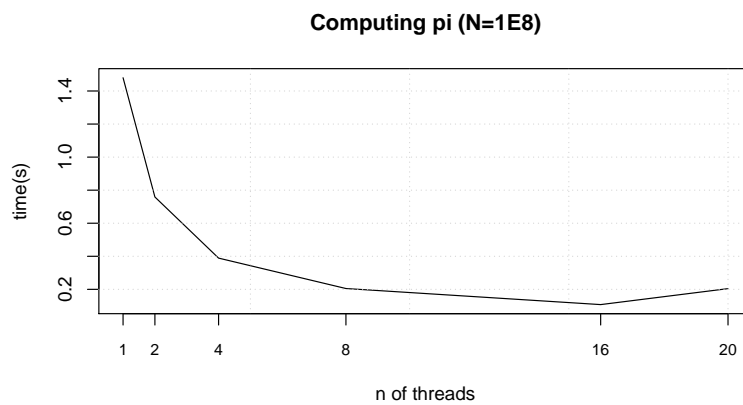
ex1

Davide Scassola

April 8, 2019

## Approximate $\pi$

The following plot shows the time used to approximate  $\pi$  ( $10^8$  iterations) versus the number of threads:



We can see that at a certain point there is no more scaling.

To protect the summation I tried with critical section, atomic and reduction variable, and I verified that they all give the same elapsed time results.