

Assignment 4: OpenMp & MPI Hybrid implementation of the N body problem.

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1 Introduction

Introduction of the n body problem and the current aim of the assignment

2 Parallelisation strategy

(10% of marks)

3 Serial Code Vs MPI & OpenMp Code

Discussion of accuracy and performance compared to the provided serial version, including the optimum granularity (#MPI process, #OpenMP threads) (30%)

4 The processing of Compiler reports and Code Profiling

Discussion of how you examined compiler reports and/or profiled the code, what you learned and how (if appropriate) you implemented what you learned (20%)

5 Scaling of the code to model galaxy formation

10%