**Blue Waters Petascale Semester Curriculum v1.0**

**Unit 1: Computation Across the Curriculum**

**Lesson 5: Why Parallel Programming?**

**References / Further Reading**

*Developed by Colleen Heinemann for the Shodor Education Foundation, Inc.*

GalaxSee Module Documentation

<http://shodor.org/petascale/materials/UPModules/NBody/>

Lawrence Livermore National Lab Intro to Parallel Computing

<https://computing.llnl.gov/tutorials/parallel_comp/>

Introduction to Parallelism

<https://cwant.github.io/hpc-beyond/21-introduction-to-parallelism/index.html>

Why Parallel Computing

<https://livebook.manning.com/book/parallel-and-high-performance-computing/chapter-1/v-3/>



*Except where otherwise noted, this work by The Shodor Education Foundation, Inc. is licensed under CC BY-NC 4.0. To view a copy of this license, visit*[*https://creativecommons.org/licenses/by-nc/4.0*](https://creativecommons.org/licenses/by-nc/4.0)

*Browse and search the full curriculum at*[*http://shodor.org/petascale/materials/semester-curriculum*](http://shodor.org/petascale/materials/semester-curriculum)

*We welcome your improvements! You can submit your proposed changes to this material and the rest of the curriculum in our GitHub repository at*[*https://github.com/shodor-education/petascale-semester-curriculum*](https://github.com/shodor-education/petascale-semester-curriculum)

*We want to hear from you! Please let us know your experiences using this material by sending email to* [*petascale@shodor.org*](mailto:petascale@shodor.org)