An Overview of the Chapel Programming Language

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- A new parallel language
  - Under development at Cray Inc.
  - Supported through the DARPA HPCS program
- Status
  - Version 1.1 released April 15, 2010
  - Open source via BSD license
    http://chapel.cray.com/
    http://sourceforge.net/projects/chapel/

- Introduce you to Chapel with a focus on
  - Data parallelism
  - Task parallelism
  - Execution on distributed-memory systems
- Get your feedback on Chapel
- Point you towards resources to use after today
- Exercises/Homework

Rough Outline

14:15 – Welcome

14:20 – Background

14:45 – Language Basics

15:15 – Data Parallelism

15:40 – Break

15:45 – Multi-Locale Execution

16:30 – Task Parallelism

17:00 – Wrap Up

17:15 – Additional time for Exercises/Homework