WHAT IS CHIUW?

- **Ch**apel **I**mplementers and **U**sers **W**orkshop
  - general information on Chapel
  - recent developments in the language
  - uses of Chapel in different applications
  - implementation/optimization of Chapel
  - ...

- First instance of CHIUW was in 2014
  - Historically held in conjunction with IPDPS/PLDI
  - 2020: Still part of IPDPS, but virtual due to covid
  - 2021, 2022: Independent and virtual

CHIUW 2022 AT A GLANCE

- CHIUW 2022 features 13 submitted talks
  - 10 talks are ~15 minutes + Q&A
  - 3 talks are ~10 minutes + Q&A

- The authors span
  - 13 organizations
  - 7 countries
  - 7 time zones

- Some talks are pre-recorded, some are live
  - All presenters will be available for a live Q&A after the talk
  - Submissions, talk slides, and pre-recorded talks will be available at CHIUW website
    https://chapel-lang.org/CHIUW2022.html

ORGANIZING COMMITTEE

General Chair

Michelle Strout, *HPE*

Steering Committee

Brad Chamberlain, *HPE*

Mike Merrill, *U.S. DOD*

Nikhil Padmanabhan, *Yale University*

Didem Unat, *Koc University*

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Engin Kayraklioglu (chair), *HPE*

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Jason DeVinney, *Center for Computing Sciences*

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Paul Hargrove, *Lawrence Berkeley National Laboratory*

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Cathie Olschanowsky, *Boise State University*

Matthieu Parenteau, *Bombardier Inc.*

Mark Raugas, *Pacific Northwest National Laboratory*

Andy Stone, *HPE*

David Wonnacott, *Haverford College*

AGENDA

PDT	EDT	UTC	Event
8:20	11:20	3:20	State of the Project: *Brad Chamberlain, HPE*
8:50	11:50	3:50	Talk Session: Applications 1
10:05	1:05	5:05	Talk Session: Portability 1
11:00	2:00	6:00	Keynote: Hal Finkel, *U.S. Department of Energy*
12:15	3:15	7:15	Talk Session: Portability 2
1:10	4:10	8:10	Talk Session: Implementation and Analysis
2:20	5:20	9:20	Talk Session: Applications 2
3:15	6:15	10:15	Community Session: Coding Day Summaries + Open Discussion

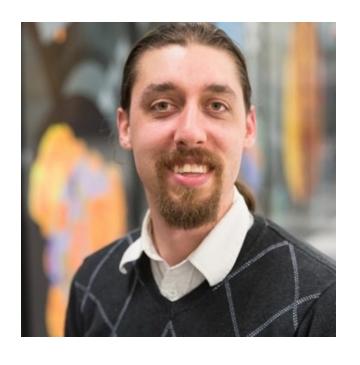Full schedule: https://chapel-lang.org/CHIUW2022.html

KEYNOTE

Community Research Priorities for Next-Generation Scientific Computing

Hal Finkel, *U.S. Department of Energy*

In this talk, I'll review **recent work on programming systems** sponsored by the U.S. Department of Energy's Advanced Scientific Computing Research program and **community research priorities** for hardware/software co-design, scientific machine learning, data management, cybersecurity and privacy, and software development. **Future work on programming systems** is expected to have an impact on, and be impacted by, progress in these important areas. I will highlight specific aspects of the identified research directions that directly relate to programming systems. Finally, I will discuss recent community input on **software sustainability for scientific and high-performance computing** and highlight some of the requirements for future programming systems that input might imply.

PDT	EDT	UTC
11:00	2:00	6:00

UPDATES FROM THE CODING DAY

- We held the first virtual CHIUW Coding Day yesterday (June 9th)
  - Chapel users and enthusiasts worked with developers in a peer-programming setting
  - Participants will give updates towards the end of the day

PDT	EDT	UTC
3:15	6:15	10:15

Participants

- Luca Ferranti, *University of Vaasa, Finland*
- Josh Milthorpe and Brett Eiffert, *Oak Ridge National Laboratory, US*
- Nikhil Padmanabhan, *Yale University, US*
- Luis Rolando Gonzalez, *HPE, US*
- Thomas Rolinger, *University of Maryland, US*
- Tom Westerhout, *Radboud University, Netherlands*

Helpers

- Michael Ferguson
- Ben Harshbarger
- Engin Kayraklioglu
- David Longnecker
- Ben McDonald
- Mike Merrill
- Elliot Ronaghan
- Andy Stone
- Michelle Strout

CODING DAY SUMMARIES

PDT	EDT	UTC
3:15	6:15	10:15

- We held the first virtual CHIUW Coding Day yesterday (June 9th)
  - Chapel users and enthusiasts worked with developers in a peer-programming setting
  - Participants will give updates towards the end of the day

Participants

- Luca Ferranti, *University of Vaasa, Finland* (w/ Michelle, Brad, Jeremiah)
- Luis Rolando Gonzalez, *HPE* (w/ Ben McD, Elliot)
- Josh Milthorpe and Brett Eiffert, *Oak Ridge National Laboratory, US* (w/ Engin, Andy)
- Tom Westerhout, *Radboud University, Netherlands* (w/ Engin, Ben H)
- Thomas Rolinger, *University of Maryland, US* (w/ Michael)
- Nikhil Padmanabhan, *Yale University, US* (w/ DavidL + …?)

Thereafter: open community discussion about… whatever you like
  - will start recorded, and then turn off recording at some point

PDT	EDT	UTC
3:45	6:45	10:45

LOGISTICS

- We will use Zoom for Q&A and all interactions
- If you have a question for a speaker:
  - Option 1:
    - Raise your hand anytime,
    - Wait for the session chair to give you the floor during Q&A,
    - Unmute and ask
  - Option 2:
    - Type your question in the Zoom chat, sending it to "Everyone"
    - The session chair will relay your question to the speaker during Q&A

- Feel free to unmute yourself during breaks to start a conversation!

THANK YOU

https://chapel-lang.org
@ChapelLanguage