



**Hewlett Packard
Enterprise**

WELCOME TO CHIUW 2023

The 10th Annual Chapel Implementers and Users Workshop

June 2nd, 2023

Engin Kayraklioglu, HPE
Program Committee Chair

chapel-lang.org/CHI UW2023.html

WHAT IS CHIUW?

- **Chapel Implementers and Users Workshop**
 - 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, 2023: Independent and virtual



CHI UW 2023 AT A GLANCE

- CHI UW 2023 features 15 submitted talks
 - 3 talks are 20 minutes including Q&A
 - 10 talks are 15 minutes including Q&A
 - 2 talks are 10 minutes including Q&A
- The authors span
 - 18 organizations
 - 7 countries
- 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 CHI UW website
<https://chapel-lang.org/CHI UW2023.html>



ORGANIZING COMMITTEE

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Michelle Strout, *HPE*

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Andrew Younge, *Sandia National Laboratories*



AGENDA

PDT	EDT	UTC	Event
8:05	11:05	3:05	State of the Project: <i>Brad Chamberlain, HPE</i>
8:35	11:35	3:35	Session 1: Productivity
9:30	12:30	4:30	Session 2: Optimizations and Portability
10:30	1:30	5:30	Keynote: Paul Hargrove, <i>Lawrence Berkeley National Laboratory</i>
11:45	2:45	6:45	Session 3: Arkouda
12:45	3:45	7:45	Session 4: Applications and Performance Analysis
1:35	4:35	8:35	Session 5: GPUs
2:40	5:40	9:40	Open Discussion

Full schedule: <https://chapel-lang.org/CHI UW2023.html>



KEYNOTE

PGAS Programming Models: My 20-year Perspective

Paul Hargrove, *Lawrence Berkeley National Laboratory*

Paul H. Hargrove has been involved in the world of Partitioned Global Address Space (PGAS) programming models since 1999, before he knew such a thing existed. Early involvement in the GASNet communications library as used in implementations of UPC, Titanium and Co-array Fortran convinced Paul that **one could have productivity and performance without sacrificing one for the other**. Since then, he has been among the apostates who work to **overturn the belief that message-passing is the only (or best) way to program for High-Performance Computing (HPC)**. Paul has been fortunate to witness the history of the PGAS community through several rare opportunities, including interactions made possible by the wide adoption of GASNet and through operating a PGAS booth at the annual SC conferences from 2007 to 2017. In this talk, Paul will share **some highlights of his experiences across 24 years of PGAS history**. Among these is the DARPA High Productivity Computing Systems (HPCS) project which helped give birth to Chapel.



PDT	EDT	UTC
10:30	1:30	5:30

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!





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THANK YOU



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