

# IEEE HotI 32 (2025) Day2

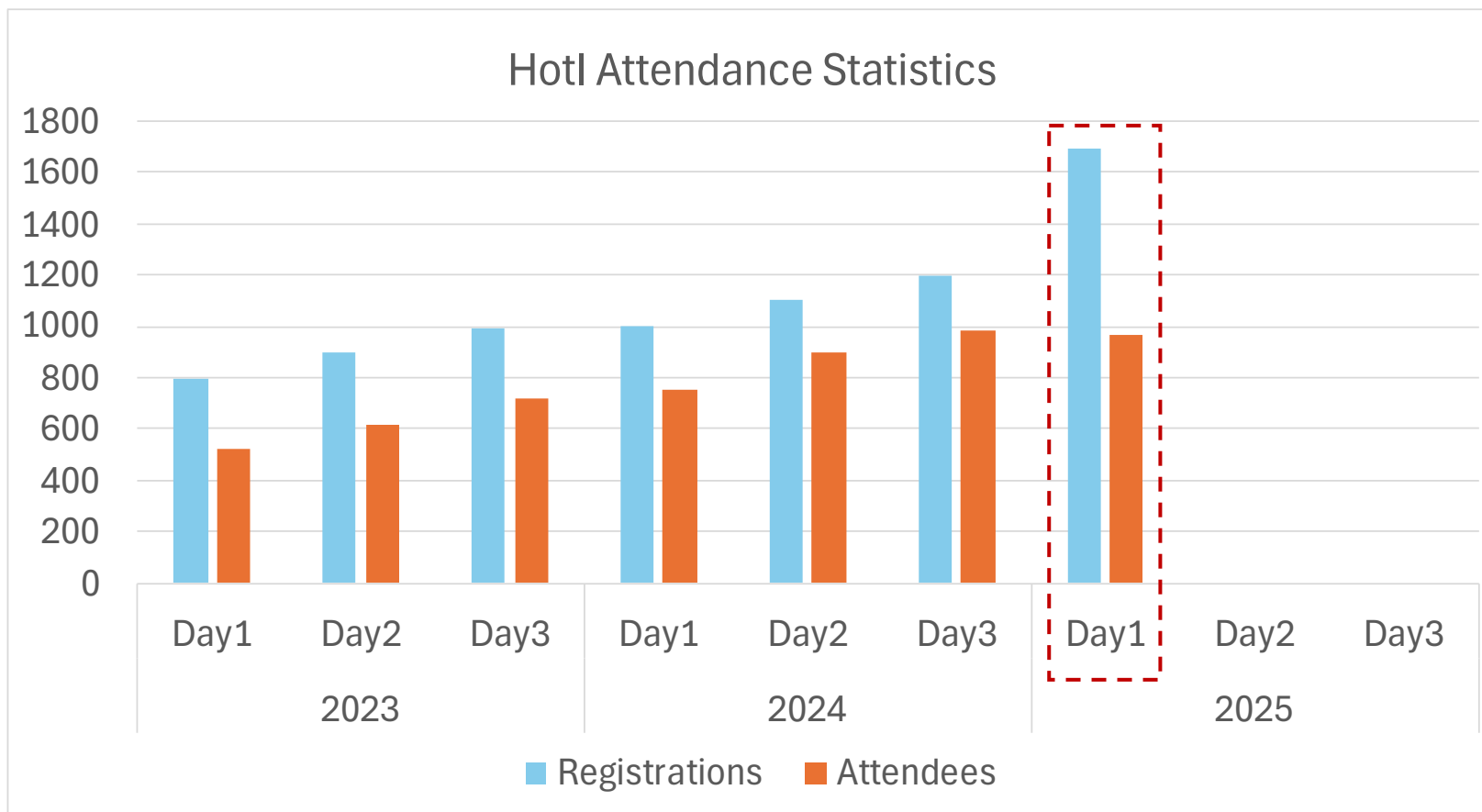
Artem Y. Polyakov  
General Chair



## HOTI 2025

IEEE Symposium on High-Performance Interconnects  
20-22 August 2025 • Virtual, United States

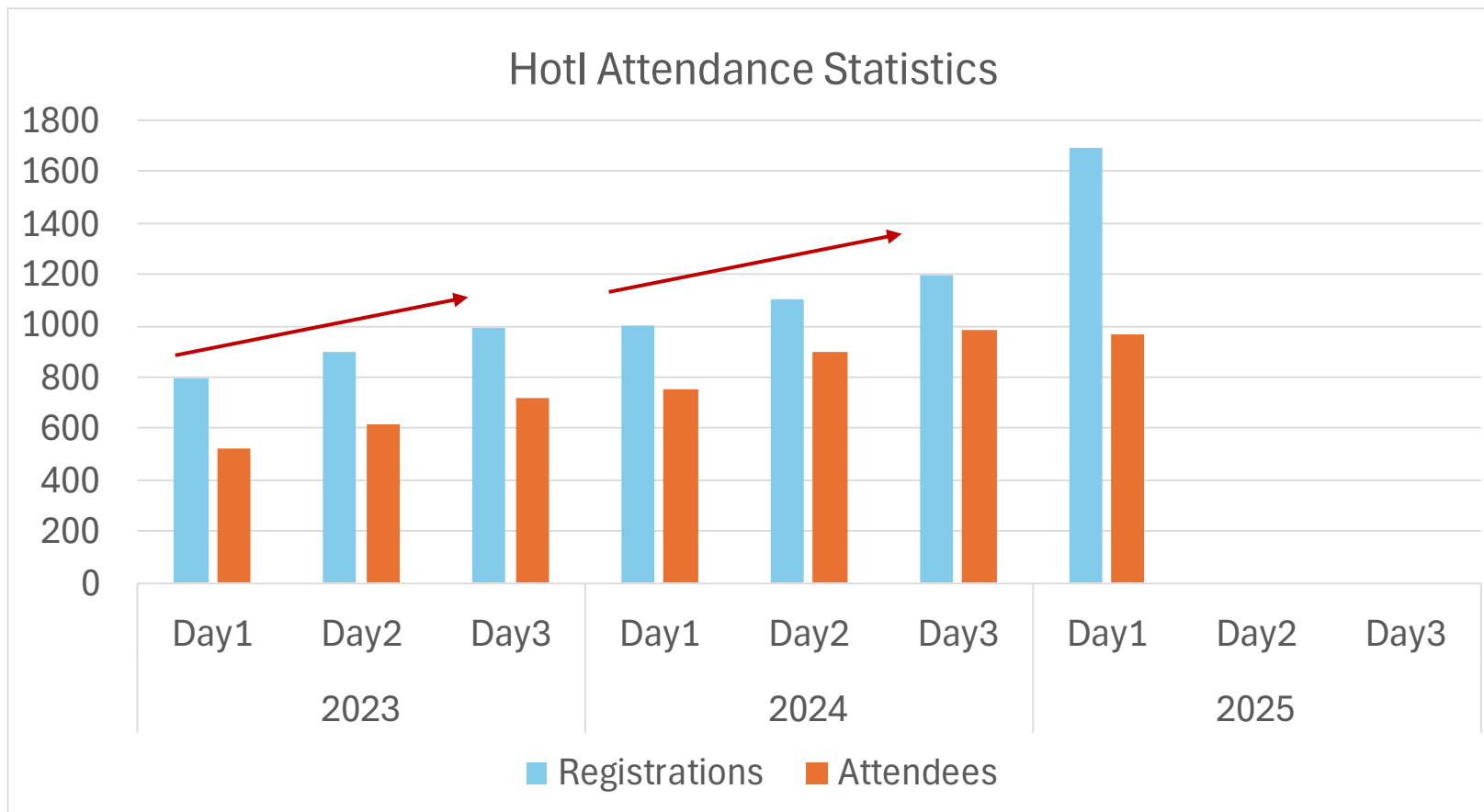
# Day 1 Attendance Stats



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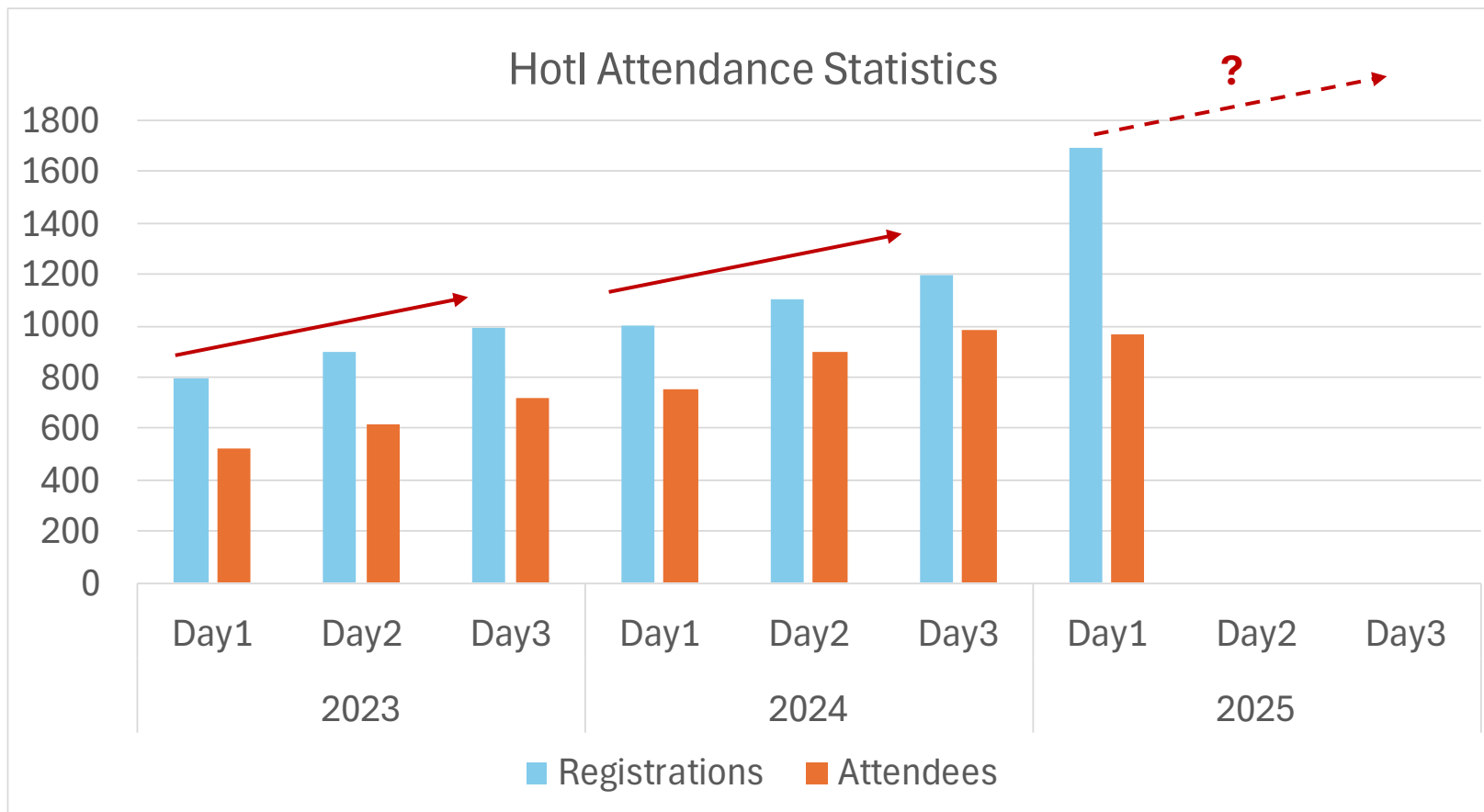
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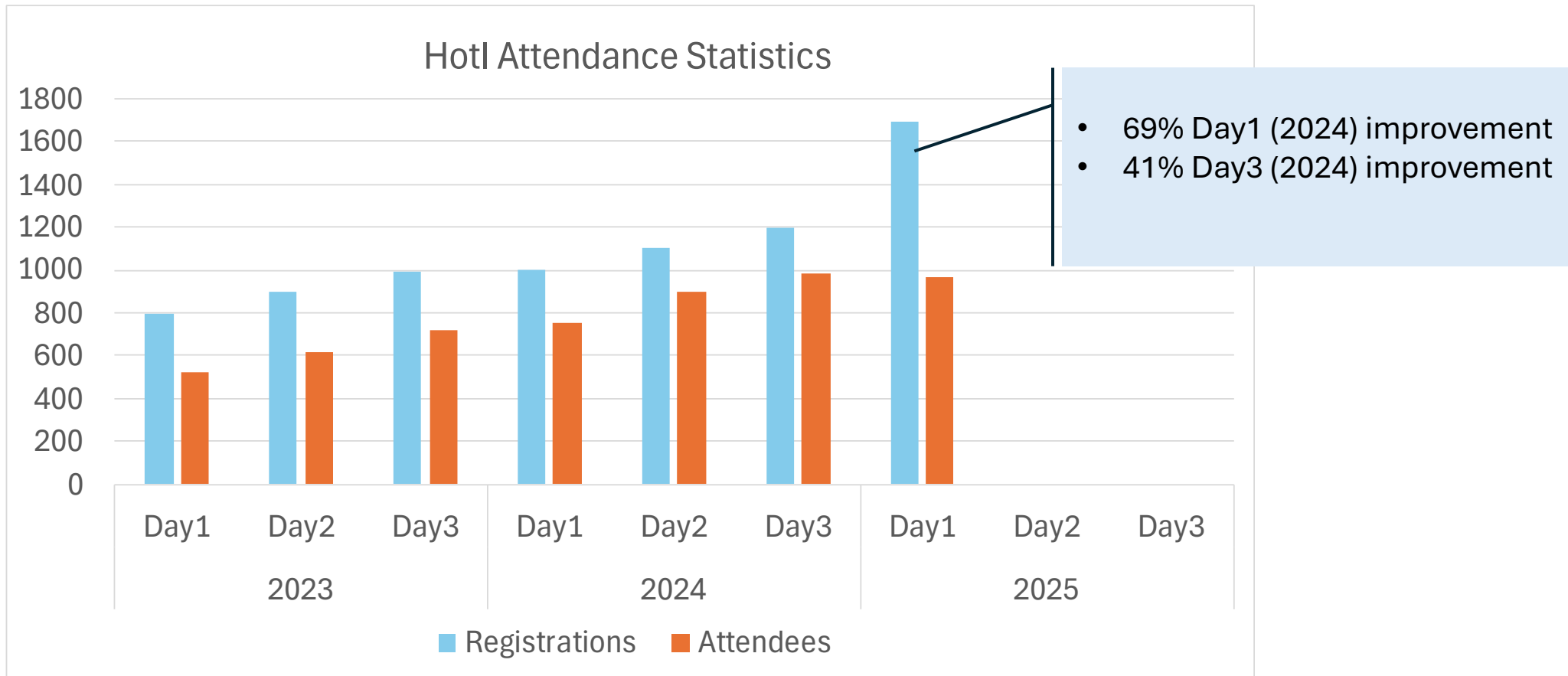
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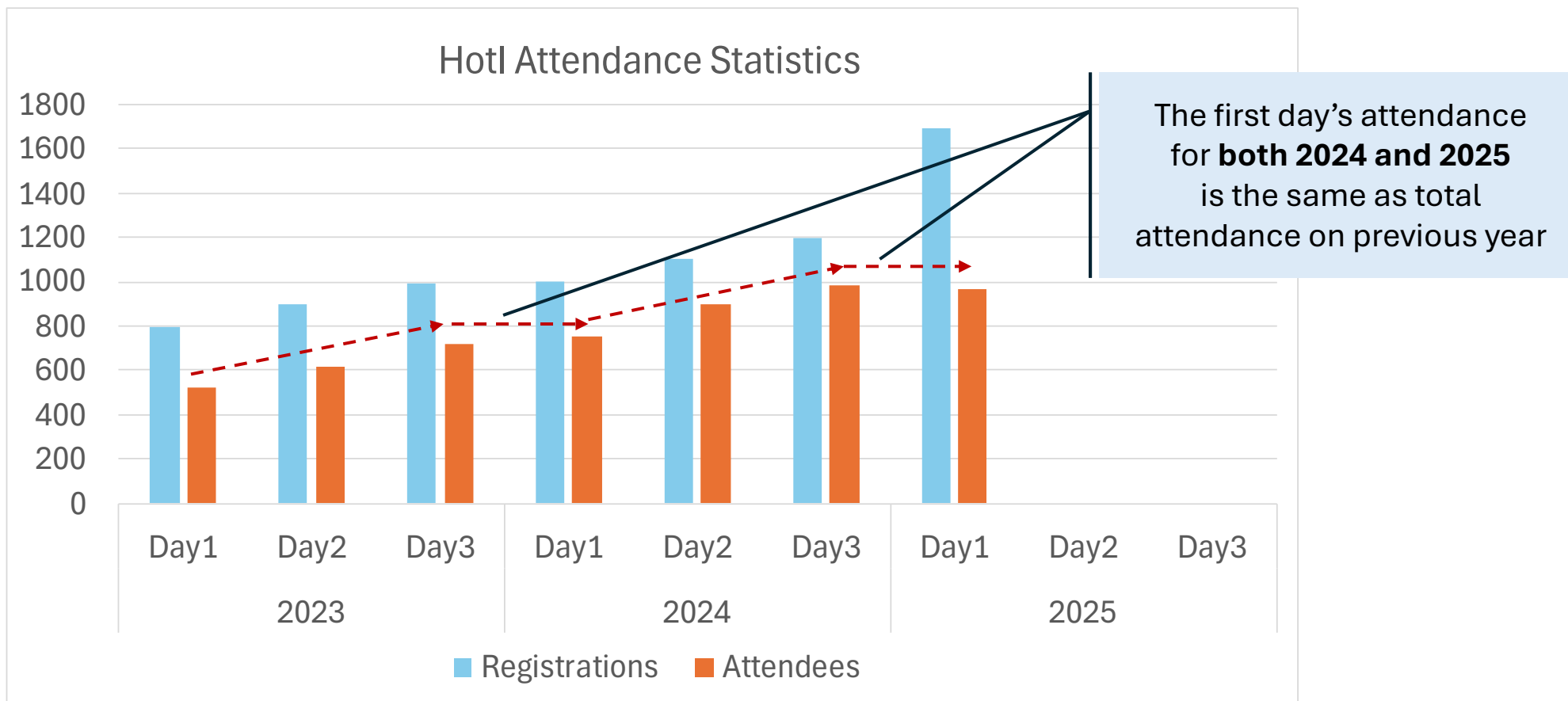
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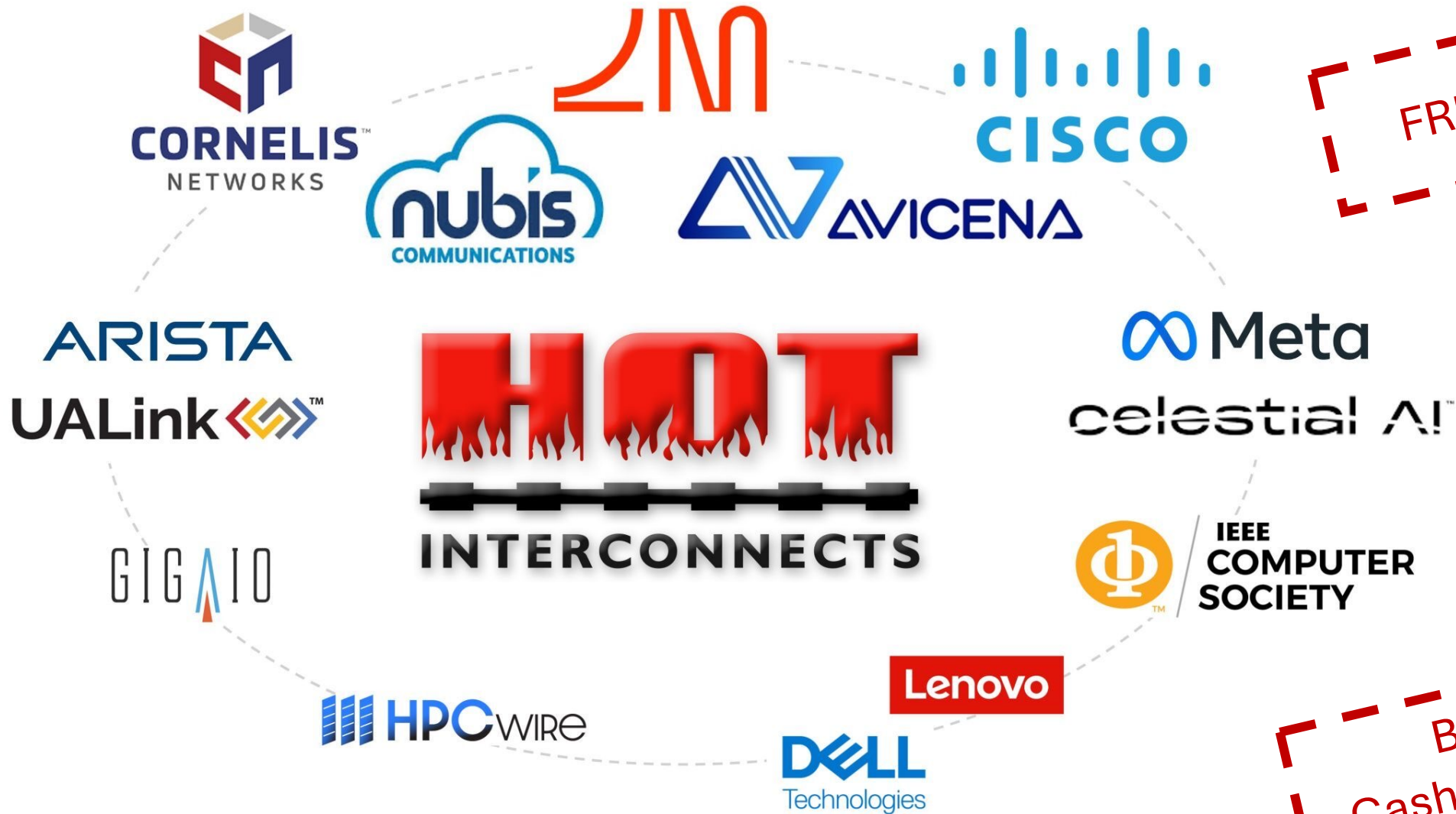
# Day 1 Attendance Stats



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# Thank you for your support!



FREE Registration

Music by:

THE DAYOFFS



OUT OF CONTEST

Art  
Police

Mayfield  
Park

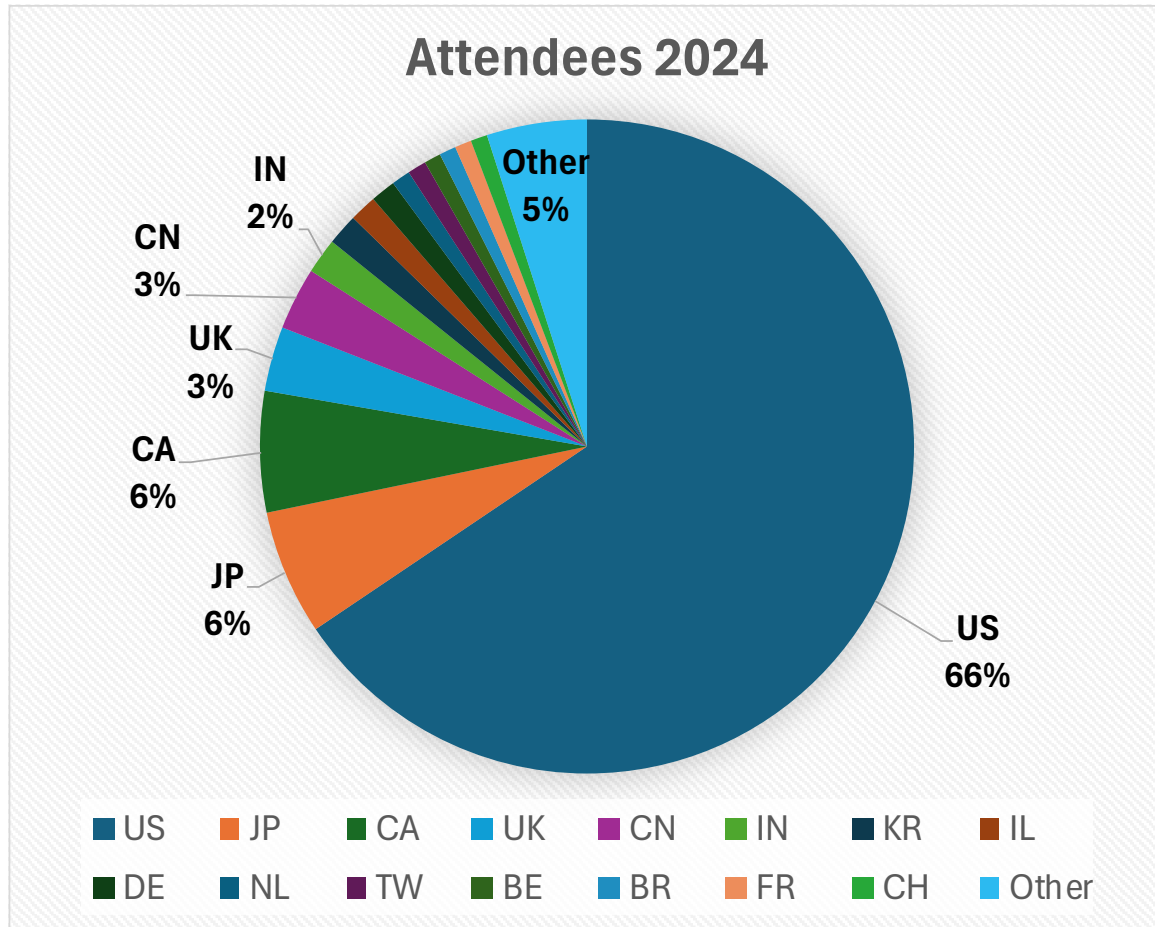
Best Paper  
Cash Award - \$1000



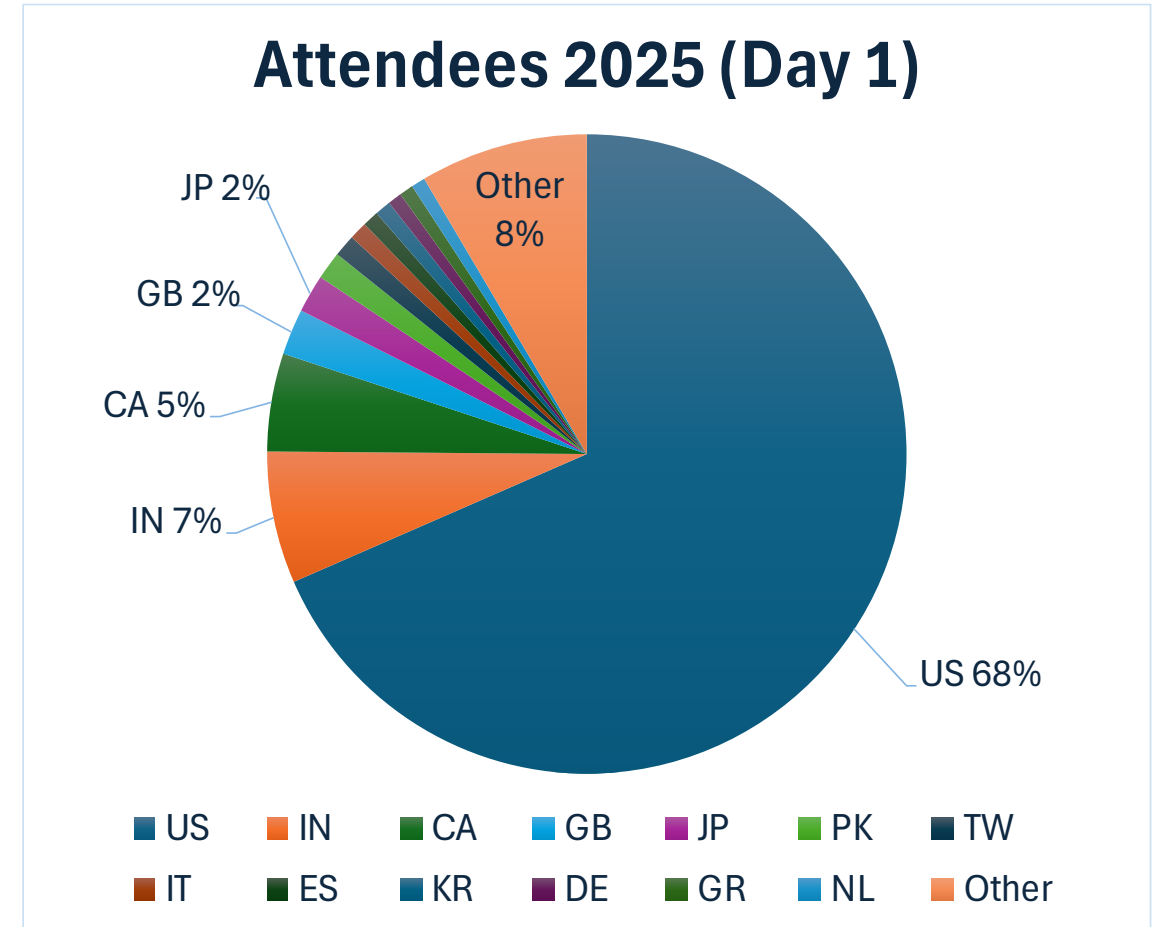
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# Attendance Stats



44 countries



48 countries



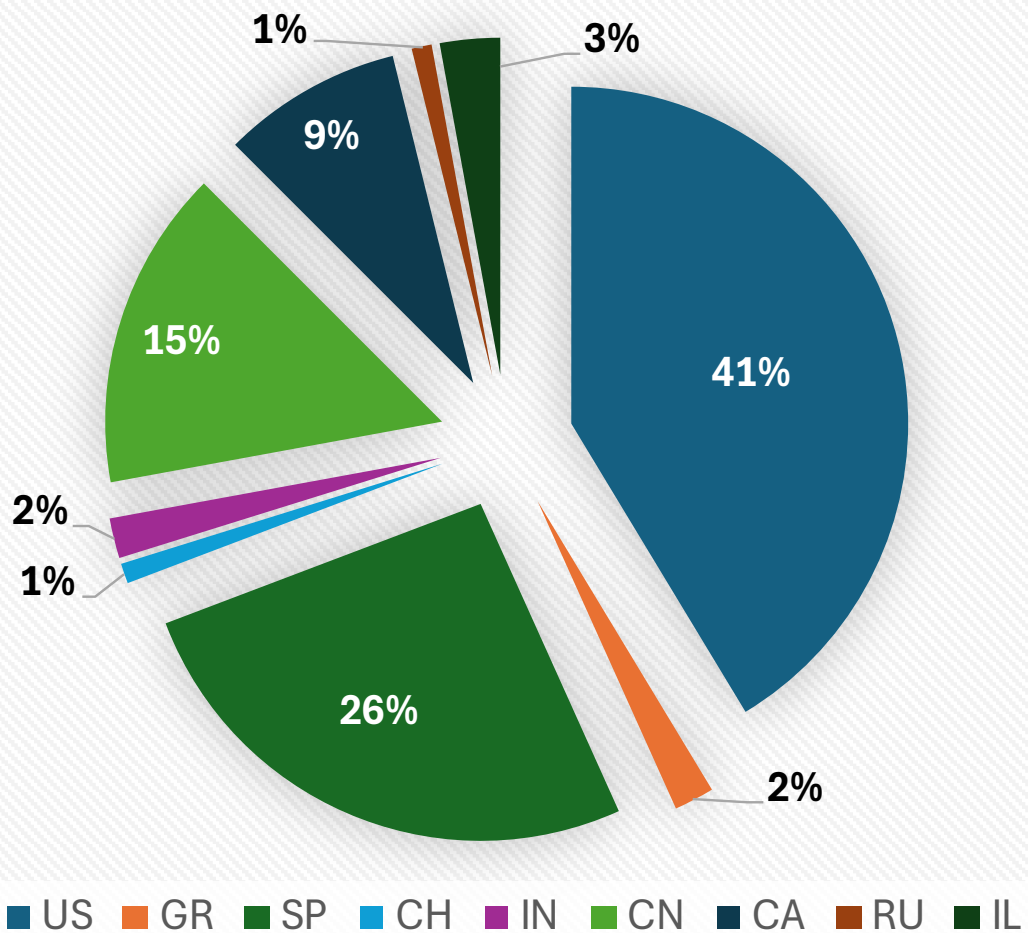
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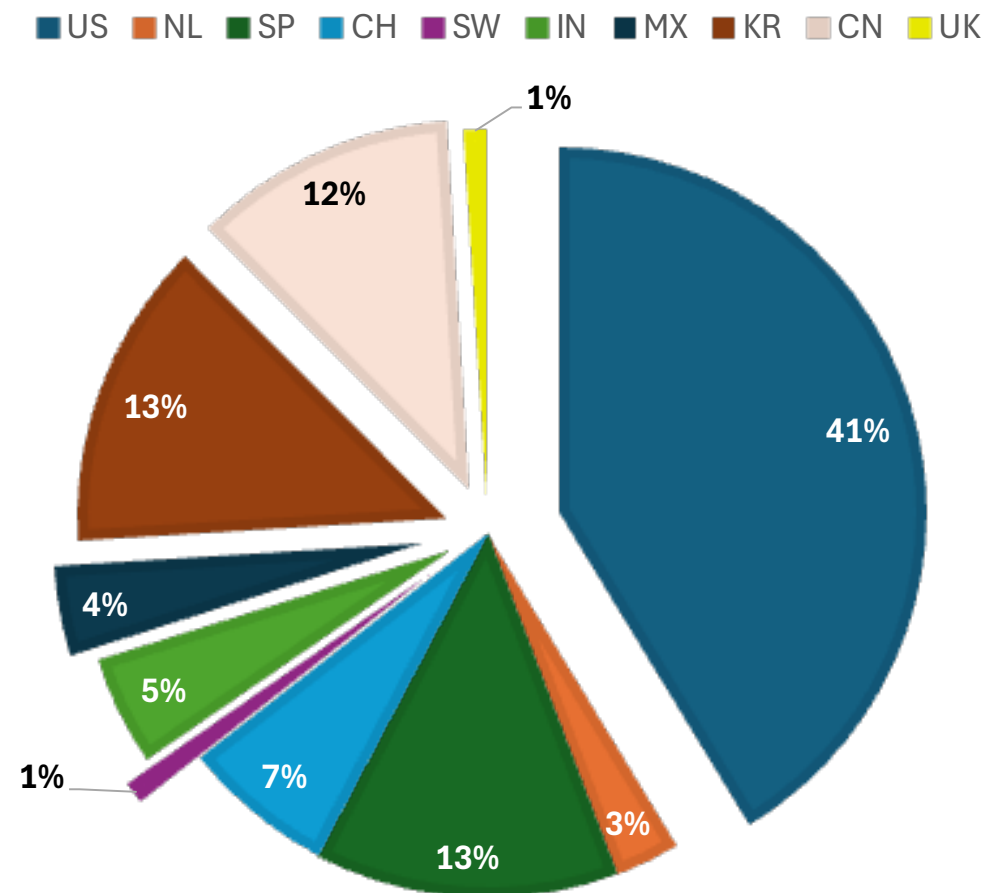


# Submission statistics

## Paper authors by countries (2024)



## Paper authors by countries (2025)



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# Technical program (2025)

- HotI'25 Technical Program Committee (TPC)
  - 31 members
  - From
    - 19 organizations (37% Academia, 63% Industry)
    - France, Japan, South Korea, Spain, Switzerland, and US
- Peer review process
  - 4 reviews/paper
  - 9 Papers accepted
    - 8 full papers
    - 1 short hot-topic paper
  - Overall acceptance rate of 39%



# HotI Technical Program Committee

Ferrol Aderholdt (NVIDIA)	Mohiuddin Mazumder (Intel)
Yuichiro Ajima (Fujitsu Limited)	Md Atiqul Mollah (Cornelis Networks)
Ron Brightwell (SNL)	Kaiming Ouyang (NVIDIA)
Ram Sharan Chaulagain (FSU)	Kishore Punniyamurthy (NVIDIA)
Swadesh Choudhary (Intel)	Raghunath Raja Chandrasekar (Amazon Web Services)
Jens Domke (RIKEN)	Adrien Roussel (CEA)
Hans Eberle (NVIDIA)	Galen Shipman (LANL)
Edgar Gabriel (AMD)	Craig Stunkel (NVIDIA)
Pedro Javier Garcia (UCLM, Spain)	Hugo Taboada (CEA)
Letizia Giuliano (Alphawave Semi)	Anant Thakar (Lightmatter)
Mitch Gusat (IBM Zurich)	Keith Underwood (HPE)
Jahanzeb Maqbool Hashmi (NVIDIA)	Vishwanath Venkatesan (NVIDIA)
Hyun-Wook Jin (Konkuk University)	Anna Verner (NVIDIA)
Jithin Jose (Microsoft)	Gwendolyn Voskuilen (SNL)
Shelby Lockhart (AMD)	Xin Yuan (FSU)
Xiaoyi Lu, (UC, Merced)	



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# HotI Organizing Committee (OC)

General Chair	Artem Polyakov	<i>NVIDIA</i>
Vice Chair	Sayan Ghosh	<i>Pacific Northwest National Laboratory</i>
PC Chairs	Rohit Zambre	<i>NVIDIA</i>
	David Ozog	<i>Cornelis Networks</i>
Keynote/Panel Chairs	Dan Pitt	<i>Palo Alto Innovation Advisors</i>
	Alan Benjamin	<i>GigaIO</i>
	Pavel Shamis	<i>NVIDIA</i>
	Taylor Groves	<i>Lightmatter</i>
Tutorial Chairs	Amanda Bienz	<i>UNM</i>
	Matthew Dosanjh	<i>Sandia National Laboratories</i>
Online Conference Chairs	Matthew Fricke	<i>UNM</i>
	Nicholas Sarkauskas	<i>NVIDIA</i>
	Pepper Marts	<i>HPE</i>
Web Chairs	Timothy Stamler	<i>NVIDIA</i>
	Yuke Li	<i>UC Merced</i>

Publicity Chairs	Subhadeep Bhattacharya	<i>NVIDIA</i>
	Don Draper	<i>ProPrincipia International Associates</i>
Finance Chairs	Scott Levy	<i>Sandia National Laboratories</i>
	Jim Dinan	<i>NVIDIA</i>
Publication Chairs	Nicola Andriolli	<i>University of Pisa</i>
	Shannon Kinkead	<i>Sandia National Laboratories</i>
Journal Chairs	Joseph Schuchart	<i>Stony Brook University</i>
	Whit Schonbein	<i>Sandia National Laboratories</i>
Sponsor Chairs	Raj Channa	<i>RBC Capital Markets</i>
	Emilio Paolini	<i>Scuola Superiore Sant'Anna</i>
Award Chairs	Ryan Grant	<i>Queen's University</i>
	Yiltan Temucin	<i>AMD</i>



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# HotI Steering Committee

Jim Dinan (Chair)	NVIDIA
Allen Baum	Esperanto Technologies
Raj Channa	RBC Capital Markets
Don Draper	ProPrincipia International Associates
Madeleine Glick	Columbia University
Manjunath Gorentla Venkata	NVIDIA
Ryan Grant	Queen's University
Mitch Gusat	IBM Research
John Lockwood	Algo-Logic Systems
Fabrizio Petrini	Intel Labs
Dan Pitt	Palo Alto Innovation Advisors
Xinyu Que	IBM Research
Pavel Shamis	NVIDIA



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# Yesterday's poll

## How did you hear about Hot-I?

Poll ended | 1 question | 125 total responses ⓘ

1. How did you learn about HotI this year?  
(Multiple choice)

125/125 (100%) answered

I follow the event on yearly basis (58/125) 46%

LinkedIn (26/125) 21%

From HPC announcement email list (9/125) 7%

X/Twitter (3/125) 2%

Hot Interconnects mailing list (21/125) 17%

It was recommended to me by someone (30/125) 24%

Other (9/125) 7%



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# HotI Social Media

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 <https://www.youtube.com/@IEEEHOTI>

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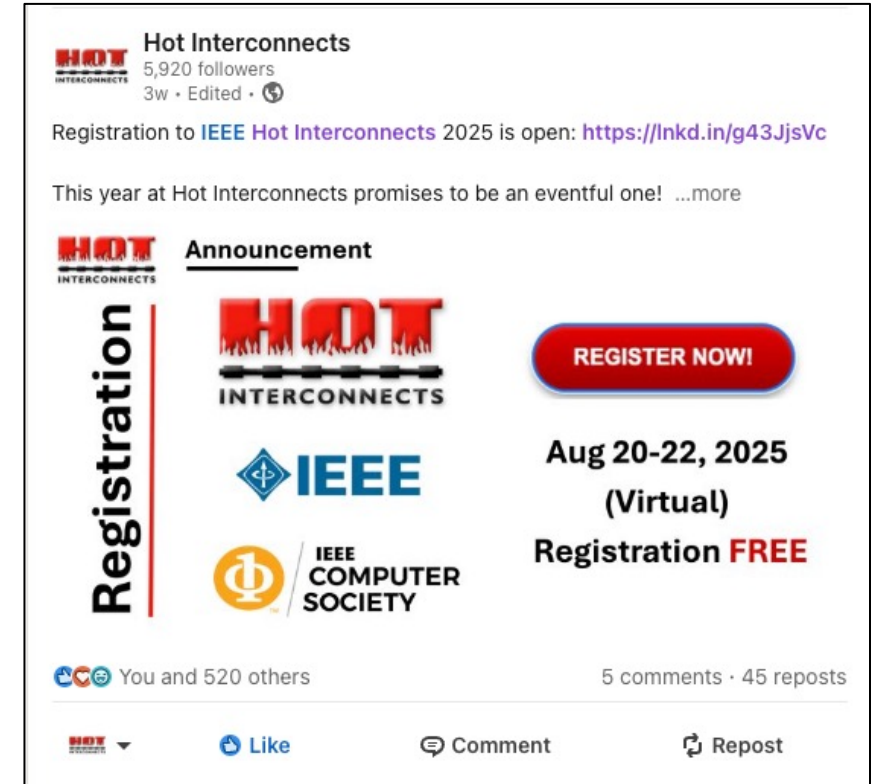


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The screenshot shows a LinkedIn post from the 'Hot Interconnects' page, which has 5,920 followers. The post is an announcement for the IEEE Hot Interconnects 2025 conference. It includes a registration link, the event dates (Aug 20-22, 2025), the format (Virtual), and the registration cost (FREE). The post also features logos for HOT INTERCONNECTS, IEEE, and the IEEE COMPUTER SOCIETY. The post has 520 likes and 45 reposts.

**Hot Interconnects**  
5,920 followers  
3w • Edited •

Registration to [IEEE Hot Interconnects 2025](https://lnkd.in/g43JjsVc) is open: <https://lnkd.in/g43JjsVc>

This year at Hot Interconnects promises to be an eventful one! ...more

**Announcement**

**Registration**

**HOT INTERCONNECTS**

**IEEE**

**IEEE COMPUTER SOCIETY**

**REGISTER NOW!**

**Aug 20-22, 2025 (Virtual)**

**Registration FREE**

You and 520 others

5 comments • 45 reposts

**Like** **Comment** **Repost**



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**Hot Interconnects**  
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**Hot Interconnects**  
5,941 followers  
4mo •

Hot Interconnects Best Industry Paper 2024: "Unified Collective Communication (UCC): An Unified Library for CPU, GPU, and DPU Collectives" ...more


**IEEE**


**IEEE COMPUTER SOCIETY**

2024 IEEE Symposium on High-Performance Interconnects (HotI 31)

## Best Industry Paper Award

*presented to*

Ferrol Aderholdt, Manjunath Gorentla Venkata, Valentine Petrov, Sergey Lebedev, Devendar Bureddy, Joshua Ladd, Gil Bloch, Mike Dubman, and Gilad Shainer

*for the paper*

**Unified Collective Communication (UCC):  
A Unified Library for CPU, GPU, and DPU Collectives**


Matthew G.F. Dossouh  
General Chair


Artem Polyakov  
Vice General Chair


71

1 comment • 4 reposts

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**Hot Interconnects**  
5,920 followers  
7mo • Edited • 


🎄 As the festive season unfolds and we bid farewell to an incredible 2024, the [Hot Interconnects](#) Organization Committee takes a moment to relax and recharge in their favorite HotI-branded gear. 😎 ...more





38

4 reposts




IEEE  
COMPUTER  
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HotI 31)

**Award**

r, Sergey Lebedev,  
d Gilad Shainer

(UCC):  
PU Collectives

  
olyakov  
al Chair

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We are thrilled to announce that **Hot Interconnects'** LinkedIn page crossed 1K followers! 🎉 ...more


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Introducing the first round of sponsors for **Hot Interconnects 2024.**







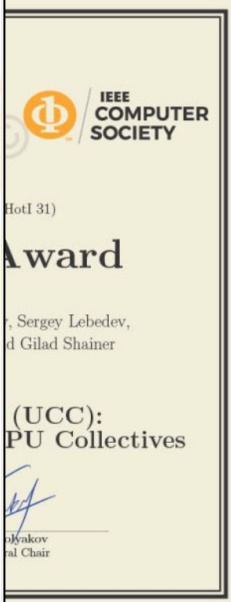
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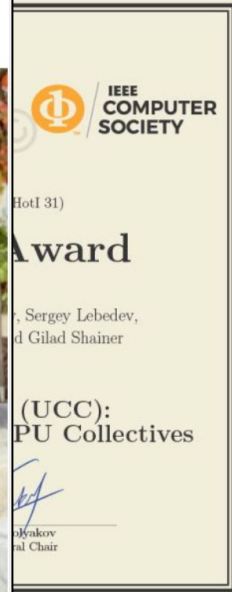


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We're pleased to announce that all the talks from **Hot Interconnects 2024** are now available on **YouTube!**  
Check it out here: <https://lnkd.in/gewNBxm>

A sincere thanks to our Online Conference Chairs, **Matthew Fricke (The University of New Mexico)** and **Shannon Kinhead (Sandia National Laboratories)**, for their dedication in ensuring the success of the online format. Their efforts in capturing and publishing the sessions mean that everyone can now access valuable insights from leading experts in both industry and academia.

Explore the talks on YouTube.  
Stay informed!




IEEE COMPUTER SOCIETY  
Award  
for Achievement in Research  
(UCC):  
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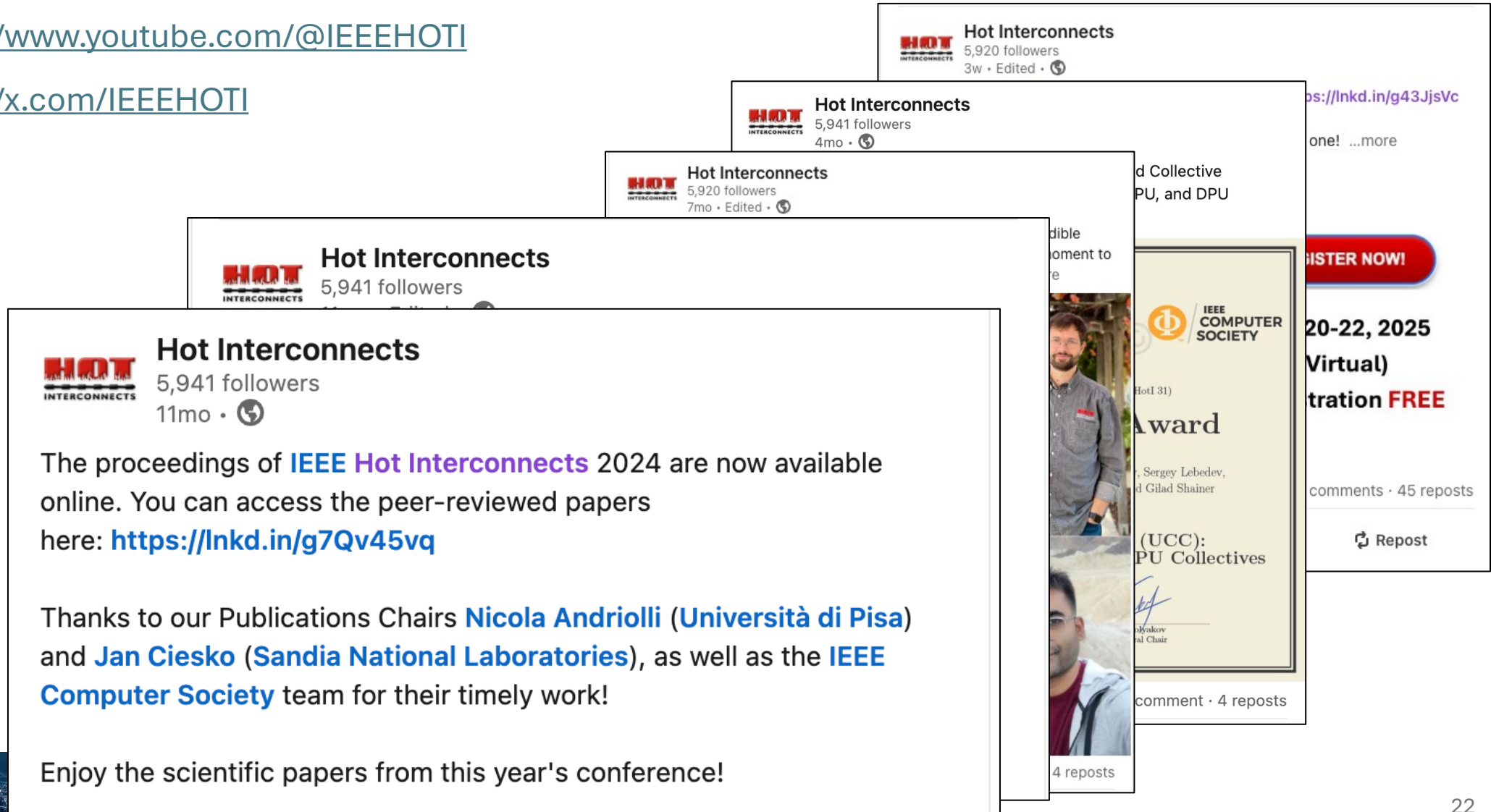
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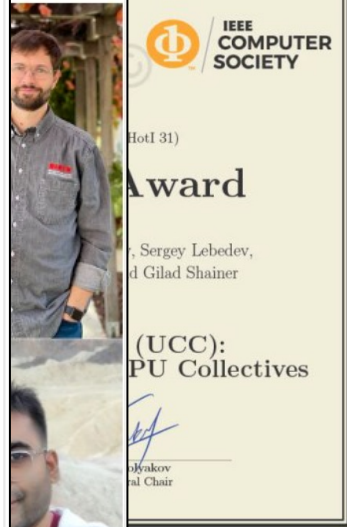


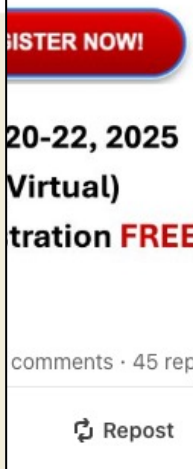
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5,941 followers  
11mo • 

The proceedings of **IEEE Hot Interconnects 2024** are now available online. You can access the peer-reviewed papers here: <https://lnkd.in/g7Qv45vq>

Thanks to our Publications Chairs **Nicola Andriolli** (**Università di Pisa**) and **Jan Ciesko** (**Sandia National Laboratories**), as well as the **IEEE Computer Society** team for their timely work!

Enjoy the scientific papers from this year's conference!

  
Award  
HotI 31)  
r, Sergey Lebedev,  
d Gilad Shainer  
(UCC):  
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6mo • 

Welcome to **Hot Interconnects** 2025!

As we step into the 32nd edition of Hot Interconnects, we ...more



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5,920 followers  
7mo • Edited • **Hot Interconnects**  
5,941 followers  
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well as the IEEE

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4 reposts



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## Day2 ... let's start!



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# Attendee Information

## Questions and Answers

are conducted via SLACK!

**Step1.** Find the link to join in Zoom Lobby (top-right corner)



<http://bit.ly/4lBoSLc>

Early access to proceedings

<https://hoti.org/program.html>

To Interact with our Presenters Join  
Slack

Show more

Slack Q&A

**Step2.** Individual channel for each talk

▼ Channels ▼

# day1-09-30-keynote-1-now-in-focus-the-fifth-genai-ep...

# day1-10-30-diamond-sponsor-talk-lightmatter-transfor...

# day1-10-45-diamond-sponsor-talk-cornelis-reimagining-...

# day1-11-00-p1-bittide-control-time-not-flows-2025

# day1-11-00-p2-deadlock-free-routing-for-full-mesh-net...



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# HotI Day2

- **Keynote 2**  
*“Evolving inter-connect fabric and SDN in the cloud to meet the needs of AI”*  
Deepak Bansal (Microsoft)
- **Sponsor talks session:** Avicena, Arista, GigaIO
- **Technical Paper Session C:**  
Interconnect Software – Runtimes & Workloads
- *Lunch*
- **Invited Talk Session:** Next Gen Interconnects
  - Ultra Ethernet for next-generation AI and HPC workloads, Torsten Hoefler (ETH Zurich)
  - Building Custom AI Infrastructure with NVLink Fusion, Krishnan Geeyarpuram (NVIDIA)
- **Sponsor talks session:** UALink, Celestial AI, Meta
- **Technical Paper Session D:** Scale-up Interconnects
- **HotI Awards & Closing Remarks**



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