

24th ACM/IEEE



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International Workshop on System-Level Interconnect Pathfinding (SLIP)

Co-located with ACM/IEEE Intl. Conf. on Computer-Aided Design Conference
November 3, 2022

Hybrid: In-Person or Virtual Workshop

Co-sponsored by ACM SIGDA and IEEE Computer Society TCVLSI

Accepted papers are published in an IEEE/ACM proceedings

GENERAL INFORMATION

The 2022 ACM/IEEE International Workshop on System-Level Interconnect Pathfinding (SLIP) is the 24th edition of the Workshop.

SLIP, co-located with ICCAD 2022, will bring together researchers and practitioners who have a shared interest in the challenges and futures of system-level interconnect, coming from wide-ranging backgrounds that span system, application, design and technology.

The technical goal of the workshop is to identify fundamental problems, and foster new pathfinding of design, analysis, and optimization of system-level interconnects with emphasis on system-level interconnect modeling and pathfinding, DTCO-enhanced interconnect fabrics, memory and processor communication links, novel dataflow mapping for machine learning, 2.5/3D architectures, and new fabrics for the beyond-Moore era.

The submission process consists of two steps: abstract registration followed by regular technical paper submission in 4 to 6 pages plus 1 page of references, double-column, 9pt/10pt font in ACM proceedings format. To permit blind review, all papers must remove author information. Authors should submit papers electronically:

<https://easychair.org/conferences/?conf=slip22>

One author of accepted submission will present the work at the workshop. Accepted technical papers will be published in the ACM and IEEE digital libraries.

TECHNICAL TOPICS

Technical topics include but are not limited to:

- Learning and predictive models for interconnect at various IC and system design stages
- Roadmapping and pathfinding of on-chip interconnect, interconnect pipelining and 2.5D/3D chip-to-chip communication interfaces
- System-level design for FPGAs, NoCs reconfigurable systems, and domain-specific multi/many-core systems
- Design, analysis, and (co)optimization of power, clock distribution networks, and memory partitioning systems
- System-level interconnect reliability, aging, thermal, yield and cost issues
- Predictive models for power and performance of system-level interconnects
- Interconnects in bio-inspired systems, such as artificial neural networks and quantum architectures

SPECIAL SESSIONS

- Power distribution and backside interconnects in advanced technology nodes
- In/Near-memory computing

IMPORTANT DATES

Abstract Registration: September 5, 2022

Paper Submission: September 12, 2022

Author Notification: September 26, 2022

Final Version Upload: October 3, 2022

General Chair: Mustafa Badaroglu (Qualcomm)

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