Session Program

July 26, 2026 to August 1, 2026

The 43rd International Symposium on Lattice Field Theory (Lattice 2026)

Software development and machines

University of Maryland, College Park
Adele H. Stamp Student Union 3972 Campus Dr College Park, MD 20742, United States

Mon, July 27

2:00 PM

Software development and machines

Session | **Location:** Adele H. Stamp Student Union, Crossland, 3972 Campus Dr, College Park, MD 20742 | **Convener:** Xiangyu Jiang

2:00 – 2:20 PM **A Stabilized FP16 Mixed-Precision Solver**

Speaker
Dr Issaku Kanamori

2:20 – 2:40 PM **Toward Compute-Bound Lattice-QCD Software**

Speaker
Anthony Grebe

2:40 – 3:00 PM
Portability without Code Changes: Scaling QDP-JIT/Chroma via LLVM across NVIDIA, AMD, and Intel GPUs

Speaker
Frank Winter

3:00 – 3:20 PM
PerfAdvisor: An LLM-based Agent for Diagnosing Bottlenecks from GPU Systems Profiles

Speaker
Leon Hostetler

3:20 – 3:40 PM **First experiences operating and using ILDG 2.0**

Speakers
Gunnar Bali, Giovanni Pederiva

3:40 PM

4:10 PM

Software development and machines

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4:10 – 4:30 PM **Use QUDA with Python**

Speaker
Xiangyu Jiang

4:30 – 4:50 PM **Accelerating the HMC in openQxD using QUDA**

Speaker
Justus Kuhlmann

4:50 – 5:10 PM
Efficient Storage and Compression of Intermediate Data in Lattice Calculations

Speaker
Constantinos Costa

5:10 – 5:30 PM
opbasis: automated construction of minimal operator bases for lattice QCD

5:30 PM

Speaker
Nikolai Husung

Tue, July 28

4:10 PM

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4:10 – 4:30 PM **Easier parameter scans with hmcdj**

Speaker
Alexis Harilaos Verney-Provatas

4:30 – 4:50 PM **AI/ML-inspired RMHMC kernels--CPN model study**

Speaker
Nobuyuki Matsumoto

4:50 – 5:10 PM
AmPyL: A python toolkit for three-particle finite-volume spectra and scattering amplitudes

Speaker
Max Hansen

5:30 PM