Welcome to IMPACT 2020
10th International Workshop on Polyhedral Compilation Techniques

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Program

- High-Performance Compilation Opportunities in MLIR (10:00 - 11:00)
- Session 1: Polyhedral techniques for new architectures (11:30 - 13:00)
  - ▶ TC-CIM: Empowering Tensor Comprehensions for Computing In-Memory
  - ▶ Bounded Stream Scheduling in Polyhedral OpenStream
  - ▶ Generating SIMD Instructions for Cerebras CS-1 using Polyhedral Compilation Techniques
- Session 2: Tool Demonstration and Short Papers (14:00 - 14:30)
  - ▶ Farkas Lemma made easy.
  - ▶ md_poly: A Performance-Portable Polyhedral Compiler based on Multi-Dimensional Homomorphisms.
- Session 3: Theoretical advances (14:30 - 15:30)
  - ▶ Scalable Polyhedral Compilation, Syntax vs. Semantics : 1-0 in the First Round.
  - ▶ Uniform Random Sampling in Polyhedra.
- Session 4: Issues on loop parallelization (16:00 - 17:00)
  - ▶ Pipelined Multithreading Generation in a Polyhedral Compiler
  - ▶ Static versus Dynamic Memory Allocation : a Comparison for Linear Algebra Kernels

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- And all participants (you)

Keynote

- Uday Bondhugula
  (Indian Institute of Science)

- **Keynote (10:00 - 11:00):**
  High-Performance Compilation
  Opportunities in MLIR