

# Schedule : Spring 2018

This is the tentative schedule of Mélange group for the Spring 2018 semester.

Meet time & Place : Wednesdays 10:00 AM - 11:00 AM @ CSB 305

WEEK	DATE	TOPIC	PRESENTER
0	01/17/2018	SPX proposal : PARRIC	Sanjay Rajopadhye
1	01/24/2018	Execution time models	Fabrice Rastello
2	01/31/2018	-	Sanjay Rajopadhye
3	02/07/2018	Vasily Volkov, James W. Demmel, <a href="#">Benchmarking GPUs to Tune Dense Linear Algebra</a> , SC '08	Prerana Ghalsasi
4	02/14/2018	CANCELLED	Swetha Varadarajan
5	02/21/2018	Wlodzimierz Bielecki, Marek Pa lkowski, <a href="#">Tiling Arbitrarily Nested Loops by Means of the Transitive</a> , Int. J. Appl. Math. Comput. Sci. 2016	Swetha Varadarajan
6	02/28/2018	F. Irigoien, R. Triolet, <a href="#">Supernode Partitioning</a> , POPL '88	Louis-Noel Pouchet
7	03/07/2018	NO MEETING	
8	03/14/2018	SPRING BREAK	
9	03/21/2018	Patrice Quinton, Vincent van Dongen, <a href="#">The mapping of linear recurrence equations on regular arrays</a> , Journal of VLSI signal processing systems for signal, image and video technology 1989 Sanjay V. Rajopadhye, S. Purushothaman, Richard Fujimoto, <a href="#">On Synthesizing Systolic Arrays from Recurrence Equations with Linear Dependencies</a> , Proceedings of the Sixth Conference on Foundations of Software Technology and Theoretical Computer Science	Corentin Ferry
10	03/28/2018	Patrice Quinton, Vincent van Dongen, <a href="#">The mapping of linear recurrence equations on regular arrays</a> , Journal of VLSI signal processing systems for signal, image and video technology 1989 Sanjay V. Rajopadhye, S. Purushothaman, Richard Fujimoto, <a href="#">On Synthesizing Systolic Arrays from Recurrence Equations with Linear Dependencies</a> , Proceedings of the Sixth Conference on Foundations of Software Technology and Theoretical Computer Science	Corentin Ferry
11	04/04/2018	J-F. Collard, D. Barthou, P. Feautrier, <a href="#">Fuzzy Array Data Flow Analysis</a> , Journal of Parallel and Distributed Computing 1997	Tarequl, Sifat
12	04/11/2018	D. Baxter, R. Mirchandaney, J. H. Saltz, <a href="#">Run-time Parallelization and Scheduling of Loops</a> , SPAA '89	Steve Kommrusch
13	04/18/2018	TBD	

WEEK	DATE	TOPIC	PRESENTER
14	04/25/2018	TBD	
15	05/02/2018	TBD	
16	05/09/2018	TBD	

## Reading Pool

- Y. H. Chen, T. Krishna, J. S. Emer, V. Sze, [Eyeriss: An Energy-Efficient Reconfigurable Accelerator for Deep Convolutional Neural Networks](#), IEEE Journal of Solid-State Circuits 2017
- Chris Cummins, Pavlos Petoumenos, Zheng Wang, Hugh Leather, [Synthesizing benchmarks for predictive modeling](#)
- Johannes Doerfert, Tobias Grosser, Sebastian Hack, [Optimistic Loop Optimization](#)
- William F. Ogilvie, Pavlos Petoumenos, Zheng Wang, Hugh Leather, [Minimizing the Cost of Iterative Compilation with Active Learning](#), CGO '17
- Wlodzimierz Bielecki, Marek Pa lkowski, [Tiling Arbitrarily Nested Loops by Means of the Transitive](#), Int. J. Appl. Math. Comput. Sci. 2016
- Wenlei Bao, Changwan Hong, Sudheer Chunduri, Sriram Krishnamoorthy, Louis-Noel Pouchet, Fabrice Rastello, P. Sadayappan, [Static and Dynamic Frequency Scaling on Multicore CPUs](#), ACM Trans. Archit. Code Optim. 2016
- U. Bondhugula, V. Bandishti, I. Pananilath, [Diamond Tiling: Tiling Techniques to Maximize Parallelism for Stencil Computations](#), IEEE Transactions on Parallel and Distributed Systems 2016
- Audrunas Gruslys, R{ 'e}mi Munos, Ivo Danihelka, Marc Lanctot, Alex Graves, [Memory-Efficient Backpropagation Through Time](#), CoRR 2016
- Daniel J. Milroy, Allison H. Baker, Dorit M. Hammerling, John M. Dennis, Sheri A. Mickelson, Elizabeth R. Jessup, [Towards Characterizing the Variability of Statistically Consistent Community Earth System Model Simulations](#), Procedia Computer Science 2016
- T. Nowatzki, J. Menon, C. H. Ho, K. Sankaralingam, [Architectural Simulators Considered Harmful](#), IEEE Micro 2015
- J. D. Garvey, T. S. Abdelrahman, [Automatic Performance Tuning of Stencil Computations on GPUs](#), 2015 44th International Conference on Parallel Processing
- Eric Chung Kalin Ovtcharov, [Accelerating Deep Convolutional Neural Networks Using Specialized Hardware](#)
- Protonu Basu, Mary Hall, Samuel Williams, Brian Van Straalen, Leonid Oliker, Phillip Colella, [Compiler-Directed Transformation for Higher-Order Stencils](#), IPDPS '15
- Sharan Chetlur, Cliff Woolley, Philippe Vandermersch, Jonathan Cohen, John Tran, Bryan Catanzaro, Evan Shelhamer, [cuDNN: Efficient Primitives for Deep Learning](#), CoRR 2014
- Andrew Putnam, Adrian M. Caulfield, Eric S. Chung, Derek Chiou, Kypros Constantinides, John

- Demme, Hadi Esmailzadeh, Jeremy Fowers, Gopi Prashanth Gopal, Jan Gray, Michael Haselman, Scott Hauck, Stephen Heil, Amir Hormati, Joo-Young Kim, Sitaram Lanka, James Larus, Eric Peterson, Simon Pope, Aaron Smith, Jason Thong, Phillip Yi Xiao, Doug Burger, [A Reconfigurable Fabric for Accelerating Large-scale Datacenter Services](#), ISCA '14
- Martin Kong, Richard Veras, Kevin Stock, Franz Franchetti, Louis-Noël Pouchet, P. Sadayappan, [When Polyhedral Transformations Meet SIMD Code Generation](#), SIGPLAN Not. 2013
  - Louis-Noël Pouchet, Peng Zhang, P. Sadayappan, Jason Cong, [Polyhedral-based Data Reuse Optimization for Configurable Computing](#), FPGA '13
  - Sven Verdoolaege, Gerda Janssens, Maurice Bruynooghe, [Equivalence Checking of Static Affine Programs Using Widening to Handle Recurrences](#), ACM Trans. Program. Lang. Syst. 2012
  - Vinayaka Bandishti, Irshad Pananilath, Uday Bondhugula, [Tiling Stencil Computations to Maximize Parallelism](#), SC '12
  - Henry Wong, Vaughn Betz, Jonathan Rose, [Comparing FPGA vs. Custom Cmos and the Impact on Processor Microarchitecture](#), FPGA '11
  - M.-W. Benabderrahmane, L.-N. Pouchet, Cohen A., C. Bastoul, [The Polyhedral Model Is More Widely Applicable Than You Think](#), LNCS
  - Vasily Volkov, James W. Demmel, [Benchmarking GPUs to Tune Dense Linear Algebra](#), SC '08
  - Andrew R. Putnam, Dave Bennett, Eric Dellinger, Jeff Mason, Prasanna Sundararajan, [CHiMPS: A High-level Compilation Flow for Hybrid CPU-FPGA Architectures](#), FPGA '08
  - Milind Kulkarni, Keshav Pingali, Bruce Walter, Ganesh Ramanarayanan, Kavita Bala, L. Paul Chew, [Optimistic Parallelism Requires Abstractions](#), PLDI '07
  - Paul Feautrier, [Scalable and Structured Scheduling](#), Int. J. Parallel Program. 2006
  - Steven J. Deitz, Bradford L. Chamberlain, Lawrence Snyder, [Eliminating Redundancies in Sum-of-product Array Computations](#), ICS '01
  - Martin Griebl, Paul Feautrier, Christian Lengauer, [Index Set Splitting](#), International Journal of Parallel Programming 2000
  - J-F. Collard, D. Barthou, P. Feautrier, [Fuzzy Array Data Flow Analysis](#), Journal of Parallel and Distributed Computing 1997
  - J. Cong, Yuzheng Ding, [FlowMap: an optimal technology mapping algorithm for delay optimization in lookup-table based FPGA designs](#), IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems
  - Paul Feautrier, [Some Efficient Solutions to the Affine Scheduling Problem {Part I}. One-dimensional Time](#), International Journal of Parallel Programming 1992
  - Paul Feautrier, [Some Efficient Solutions to the Affine Scheduling Problem {Part II}. Multidimensional Time](#), International Journal of Parallel Programming 1992
  - P. Feautrier, [Dataflow analysis of array and scalar references](#), International Journal of Parallel Programming 1991
  - Patrice Quinton, Vincent van Dongen, [The mapping of linear recurrence equations on regular arrays](#), Journal of VLSI signal processing systems for signal, image and video technology 1989

- D. Baxter, R. Mirchandaney, J. H. Saltz, [Run-time Parallelization and Scheduling of Loops](#), SPAA '89
- F. Irigoin, R. Triolet, [Supernode Partitioning](#), POPL '88
- Sanjay V. Rajopadhye, S. Purushothaman, Richard Fujimoto, [On Synthesizing Systolic Arrays from Recurrence Equations with Linear Dependencies](#), Proceedings of the Sixth Conference on Foundations of Software Technology and Theoretical Computer Science

From: <https://www.cs.colostate.edu/AlphaZ/wiki/> - **AlphaZ**

Permanent link: <https://www.cs.colostate.edu/AlphaZ/wiki/doku.php?id=melange:schedule:spring2018&rev=1522861647>

Last update: **2018/04/04 11:07**

