

ICFP 2017 Program

Sun 3 Sep

09:00 - 10:00: Tutorials - Morning tutorial session 1 at L5

09:00 - 10:00 Tutorial T1: Writing Verified Programs in CakeML
Talk Ramana Kumar, Michael Norrish, Scott Owens, Magnus O. Myreen

09:00 - 09:10: Scheme 2017 - Session 0 at L4

09:00 - 09:10 Welcome
Day opening

09:00 - 09:10: PLMW 2017 - Welcome at L1

Chair(s): Brigitte Pientka

09:00 - 09:10 Welcome
Talk Brigitte Pientka, Neelakantan R. Krishnaswami, Dan Licata

09:00 - 09:05: TyDe 2017 - Welcome at L2

09:00 - 09:05 Welcome
Day opening Sam Lindley, Brent Yorgey

09:00 - 09:10: HOPE 2017 - Welcome at L3

09:00 - 09:10 Welcome
Day opening François Pottier, Aleksandar Nanevski

09:05 - 10:00: TyDe 2017 - Invited talk at L2

09:05 - 10:00 Driving types into PHP
Talk Andrew Kennedy

09:10 - 10:00: HOPE 2017 - Invited talk at L3

09:10 - 10:10 Invited Talk: Semantics of Effect Systems by Graded Monads
Talk Shin-ya Katsumata

09:10 - 10:00: PLMW 2017 - Keynote at L1

Chair(s): Neelakantan R. Krishnaswami

09:10 - 10:00 Keynote
Talk Chris Martens

09:10 - 10:10: Scheme 2017 - Session 1 at L4

09:10 - 10:10 Keynote
Talk Sam Tobin-Hochstadt

10:00 - 10:30: Catering - Sunday coffee break 1 at Catering

10:00 - 10:30 Sunday coffee break 1
Coffee break

10:30 - 11:30: TyDe 2017 - Full papers 1 at L2

10:30 - 11:00 Generic packet descriptions: verified parsing and pretty printing of low-level data
Talk
Marcell van Geest, Wouter Swierstra

11:00 - 11:30 Structured asynchrony with algebraic effects
Talk
Daan Leijen

10:30 - 11:30: HOPE 2017 - Modular Semantics at L3

10:30 - 11:00 Higher-order Programming is an Effect
Talk
Oleg Kiselyov

11:00 - 11:30 A monadic solution to the Cartwright-Felleisen-Wadler conjecture
Talk
Ohad Kammar, Dylan McDermott

10:30 - 11:30: Tutorials - Morning tutorial session 2 at L5

10:30 - 11:30 Tutorial T1: Writing Verified Programs in CakeML (part 2)
Talk
Ramana Kumar, Michael Norrish, Scott Owens, Magnus O. Myreen

10:30 - 11:30: PLMW 2017 - Session 1 at L1

10:30 - 11:00 A Few Frank Remarks
Talk
Conor McBride

11:00 - 11:30 Compositional Compiler Correctness
Talk
Amal Ahmed

10:30 - 11:30: Scheme 2017 - Session 2 at L4

10:30 - 11:15 Paper: Scalar and Tensor Parameters for Importing Tensor Index Notation including Einstein Summation Notation
Talk
Satoshi Egi

11:15 - 11:30 Lightning Talk: Extending the LISP model from cons cells to triples, from trees to hypergraphs
Talk
Joe Corneli, Raymond Puzio

11:20 - 12:00: Catering - Sunday coffee break 2 at Catering

11:20 - 12:00 Sunday coffee break 2
Coffee break

12:00 - 12:25: TyDe 2017 - Extended abstracts 1 at L2

12:00 - 12:25 Cogent \uparrow : giving systems engineers a stepping stone
Talk
Zilin Chen

12:00 - 12:30: Tutorials - Morning tutorial session 3 at L5

12:00 - 12:30 Tutorial T1: Writing Verified Programs in CakeML (part 3)
Talk
Ramana Kumar, Michael Norrish, Scott Owens, Magnus O. Myreen

12:00 - 12:30: HOPE 2017 - Rust at L3

12:00 - 12:30 RustBelt: Securing the Foundations of the Rust Programming Language
Talk
Ralf Jung, Jacques-Henri Jourdan, Robbert Krebbers, Derek Dreyer

12:00 - 12:30: PLMW 2017 - Session 2 at L1

12:00 - 12:30 Not How To Do Your PhD
Talk
Gabriel Scherer

12:00 - 12:30: Scheme 2017 - Session 3 at L4

12:00 - 12:30 Panel: Future of Scheme
Talk
François-René Rideau, Marc Feeley, Arthur Gleckler, Kathy Gray, Alaric Snell-Pym, Andy Wingo

12:25 - 14:00: Catering - Sunday lunch at Catering

12:25 - 14:00 Sunday lunch
Lunch

14:00 - 15:00: Tutorials - Afternoon tutorial session 1 at L5

14:00 - 15:00 Tutorial T2: Certified Functional (Co)programming with Isabelle/HOL
Talk
Jasmin Blanchette, Andreas Lochbihler, Andrei Popescu, Dmitriy Traytel

14:00 - 15:00: HOPE 2017 - Effects and Dependent Types at L3

14:00 - 14:30 Handling fibred algebraic effects
Talk
Danel Ahman

14:30 - 15:00 Only Control Effects and Dependent Types
Talk
Youyou Cong, William J. Bowman

14:00 - 15:00: TyDe 2017 - Full papers 2 at L2

14:00 - 14:30 Type safe Redis queries -- a case study of type-level programming in Haskell
Talk
Ting-Yan Lai, Tyng-Ruey Chuang, Shin-Cheng Mu

14:30 - 15:00 Type-directed diffing of structured data
Talk
Victor Cacciari Miraldo, Pierre-Evariste Dagand, Wouter Swierstra

14:00 - 15:00: PLMW 2017 - Session 3 at L1

14:00 - 14:30 Gradual Typing
Talk
Ronald Garcia

14:30 - 15:00 Scala: Types in Theory & Practice
Talk
Nada Amin

14:00 - 15:00: Scheme 2017 - Session 4 at L4

14:00 - 14:45 Paper: Toward Parallelizing Control-flow Analysis with Datalog
Talk
Thomas Gilray, Sidharth Kumar

14:45 - 15:00 Lightning: Gerbil on Gambit, as they say Racket on Chez
Talk
Dimitris Vyzovitis

14:50 - 15:30: Catering - Sunday coffee break 3 at Catering

14:50 - 15:30 Sunday coffee break 3
Coffee break

15:30 - 16:20: Tutorials - Afternoon tutorial session 2 at L5

15:30 - 16:20 Tutorial T2: Certified Functional (Co)programming with Isabelle/HOL (part 2)
Talk
Jasmin Blanchette, Andreas Lochbihler, Andrei Popescu, Dmitriy Traytel

15:30 - 16:30: HOPE 2017 - Effects at L3

15:30 - 16:00 Programming a Web Server with Algebraic Effects
Talk
Daan Leijen

16:00 - 16:30 Logical Relations for Algebraic Effects
Talk
Dariusz Biernacki, Maciej Piróg, Piotr Polesiuk, Filip Sieczkowski

15:30 - 16:20: TyDe 2017 - Extended abstracts 2 at L2

15:30 - 15:55 Affine killing
Talk
Kiko Fernandez-Reyes, Dave Clarke

15:55 - 16:20 On ringads and foldables
Talk
James McKinna

15:30 - 16:30: PLMW 2017 - Session 4 at L1

15:30 - 16:30 How to Write Papers and Give Talks That People Can Follow
Talk
Derek Dreyer

15:30 - 16:30: Scheme 2017 - Session 5 at L4

15:30 - 16:15 Report: Status of the ongoing R7RS standardization process
Talk
Alaric Snell-Pym

16:15 - 16:30 Lightning: {lambda talk}
Talk
Alain Marty

16:20 - 16:50: Catering - Sunday coffee break 4 at Catering

16:20 - 16:50 Sunday coffee break 4
Coffee break

16:50 - 17:50: Tutorials - Afternoon tutorial session 3 at L5

16:50 - 17:50 Tutorial T2: Certified Functional (Co)programming with Isabelle/HOL (part 3)
Talk
Jasmin Blanchette, Andreas Lochbihler, Andrei Popescu, Dmitriy Traytel

16:50 - 17:40: TyDe 2017 - Extended abstracts 3 at L2

16:50 - 17:15 Type oriented programming for task based parallelism
Talk
Nick Brown, Ludovic Capelli, James Mark Bull

17:15 - 17:40 Type-directed reasoning for probabilistic, non-compositional resources
Talk
Edwin Brady, Kevin Hammond, Christopher Schwaab

16:50 - 17:40: HOPE 2017 - Monotonicity at L316:50 - 17:20
Talk

Recalling a Witness

*Danel Ahman, Cătălin Hrițcu, Kenji Maillard, Aseem Rastogi, Nikhil Swamy, Cédric Fournet***16:50 - 17:40: PLMW 2017 - Session 5 at L1**16:50 - 17:40
Talk

Panel Discussion: Careers in Programming Languages

*Sam Staton, Richard A. Eisenberg, Andreas Rossberg, Daan Leijen, Amal Ahmed***16:50 - 17:50: Scheme 2017 - Session 6 at L4**16:50 - 17:40
Talk

Invited Talk

*Matthew Might*17:40 - 17:50
Day closing

Goodbye

Mon 4 Sep**09:00 - 10:00: Keynotes and Reports - Monday Keynote at L1**

Chair(s): Jeremy Gibbons

09:00 - 10:00
Talk

Compositional creativity: some principles for talking to computers

Chris Martens

KEYNOTE

10:00 - 10:30: Catering - Monday coffee break 1 at Catering10:00 - 10:30
Coffee break

Monday coffee break 1

10:30 - 12:00: Research Papers - Art and Education at L1

Chair(s): Kathryn E. Gray

10:30 - 10:52
Talk

Super 8 Languages for Making Movies (Functional Pearl)

*Leif Andersen, Stephen Chang, Matthias Felleisen*10:52 - 11:15
Talk

Testing and Debugging Functional Reactive Programming

*Ivan Perez, Henrik Nilsson*11:15 - 11:37
Talk

Lock-Step Simulation Is Child's Play (Experience Report)

*Joachim Breitner, Chris Smith*11:37 - 12:00
Talk

Scaling up Functional Programming Education: Under the Hood of the OCaml MOOC

*Benjamin Canou, Roberto Di Cosmo, Grégoire Henry***10:30 - 10:45: FSCD 2017 - Welcome at L2**10:30 - 10:45
Other

Welcome message

*Sam Staton, Dale Miller***10:45 - 11:45: FSCD 2017 - Session 1 at L2**10:45 - 11:45
Talk

Brzozowski Goes Concurrent -- A Kleene Theorem for Pomset Languages

Alexandra Silva

12:00 - 13:00: Catering - Monday lunch at Catering

12:00 - 13:00 Monday lunch
Lunch

13:00 - 14:30: Research Papers - Functional Programming Techniques at L1

Chair(s): Graham Hutton

13:00 - 13:22 Faster Coroutine Pipelines
Talk
Mike Spivey

13:22 - 13:45 A Pretty But Not Greedy Printer (Functional Pearl)
Talk
Jean-Philippe Bernardy

13:45 - 14:07 Generic Functional Parallel Algorithms: Scan and FFT
Talk
Conal Elliott

14:07 - 14:30 A Unified Approach to Solving Seven Programming Problems (Functional Pearl)
Talk
William E. Byrd, Michael Ballantyne, Gregory Rosenblatt, Matthew Might

13:00 - 14:30: FSCD 2017 - Session 2 at L2

13:00 - 13:30 Polynomial running times for polynomial-time oracle machines
Talk
Akitoshi Kawamura, Florian Steinberg

13:30 - 14:00 A Curry-Howard Approach to Church's Synthesis
Talk
Colin Riba, Pierre Pradic

14:00 - 14:30 Streett Automata Model Checking of Higher-Order Recursion Schemes
Talk
Ryota Suzuki, Koichi Fujima, Naoki Kobayashi, Takeshi Tsukada

14:30 - 15:00: Catering - Monday coffee break 2 at Catering

14:30 - 15:00 Monday coffee break 2
Coffee break

15:00 - 16:10: Research Papers - Applications at L1

Chair(s): Alexandra Silva

15:00 - 15:23 Prototyping a Query Compiler using Coq (Experience Report)
Talk
Joshua Auerbach, Martin Hirzel, Louis Mandel, Avraham Shinnar, Jerome Simeon

15:23 - 15:46 A Framework for Adaptive Differential Privacy
Talk
Daniel Winograd-Cort, Andreas Haeberlen, Aaron Roth, Benjamin C. Pierce

15:46 - 16:10 Symbolic Conditioning of Arrays in Probabilistic Programs
Talk
Praveen Narayanan, Chung-chieh Shan

15:00 - 16:00: FSCD 2017 - Session 3 at L2

15:00 - 15:30 Relating System F and $\lambda 2$: A Case Study in Coq, Abella and Beluga
Talk
Jonas Kaiser, Brigitte Pientka, Gert Smolka

15:30 - 16:00 Nested Multisets, Hereditary Multisets, and Syntactic Ordinals in Isabelle/HOL
Talk
Jasmin Blanchette, Mathias Fleury, Dmitriy Traytel

16:10 - 16:40: Catering - Monday coffee break 3 at Catering

16:10 - 16:40 Monday coffee break 3
Coffee break

16:40 - 18:10: Research Papers - Effects at L1**Chair(s): Ben Lippmeier**

16:40 - 17:02 <i>Talk</i>	Abstracting Definitional Interpreters <i>David Darais, Nicholas Labich, Phúc C. Nguyễn, David Van Horn</i>
17:02 - 17:25 <i>Talk</i>	On the Expressive Power of User-Defined Effects: Effect Handlers, Monadic Reflection, Delimited Control <i>Yannick Forster, Ohad Kammar, Sam Lindley, Matija Pretnar</i>
17:25 - 17:47 <i>Talk</i>	Imperative Functional Programs That Explain Their Work <i>Wilmer Ricciotti, Jan Stolarek, Roly Perera, James Cheney</i>
17:47 - 18:10 <i>Talk</i>	Effect-Driven QuickChecking of Compilers <i>Jan Midtgaard, Mathias Nygaard Justesen, Patrick Kasting, Flemming Nielson, Hanne Riis Nielson</i>

16:40 - 18:10: FSCD 2017 - Session 4 at L2

16:40 - 17:10 <i>Talk</i>	A polynomial-time algorithm for the Lambek calculus with brackets of bounded order <i>Max Kanovich, Stepan Kuznetsov, Glyn Morrill, Andre Scedrov</i>
17:10 - 17:40 <i>Talk</i>	A sequent calculus for semi-associativity <i>Noam Zeilberger</i>
17:40 - 18:10 <i>Talk</i>	Combinatorial Flows and their Normalisation <i>Lutz Strassburger</i>

18:10 - 18:20: Keynotes and Reports - Monday Closing Events at L1**Chair(s): Peter Thiemann**

18:10 - 18:20 <i>Day closing</i>	Monday Announcements
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18:30 - 20:30: Social Events - Welcome Reception at Foyer

18:30 - 20:30 <i>Social Event</i>	Welcome Reception
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Tue 5 Sep**09:00 - 10:00: Keynotes and Reports - Tuesday Keynote at L1****Chair(s): Mark Jones**

09:00 - 10:00 <i>Talk</i>	Assuring AI <i>John Launchbury</i>	KEYNOTE
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10:00 - 10:30: Catering - Tuesday coffee break 1 at Catering

10:00 - 10:30 <i>Coffee break</i>	Tuesday coffee break 1
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10:30 - 12:00: Research Papers - Low-level and Systems Programming at L1**Chair(s): Sam Tobin-Hochstadt**

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| 10:30 - 10:52
Talk | Persistence for the Masses: RRB-Vectors in a Systems Language
<i>Juan Pedro Bolívar Puente</i> |
| 10:52 - 11:15
Talk | Verified Low-Level Programming Embedded in F*
<i>Jonathan Protzenko, Jean-Karim Zinzindohoué, Aseem Rastogi, Tahina Ramananandro, Peng Wang, Santiago Zanella-Béguelin, Antoine Delignat-Lavaud, Cătălin Hrițcu, Karthikeyan Bhargavan, Cédric Fournet, Nikhil Swamy</i> |
| 11:15 - 11:37
Talk | Verifying Efficient Function Calls in CakeML
<i>Scott Owens, Michael Norrish, Ramana Kumar, Magnus O. Myreen, Yong Kiam Tan</i> |
| 11:37 - 12:00
Talk | Better Living through Operational Semantics: An Optimizing Compiler for Radio Protocols
<i>Geoffrey Mainland</i> |

10:30 - 11:30: FSCD 2017 - Session 5 at L2

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| 10:30 - 11:30
Talk | Uniform Resource Analysis by Rewriting: Strenghts and Weaknesses
<i>Georg Moser</i> |
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11:30 - 12:00: FSCD 2017 - Session 6 at L2

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| 11:30 - 12:00
Talk | Continuation Passing Style for Effect Handlers
<i>Daniel Hillerström, Sam Lindley, Bob Atkey, KC Sivaramakrishnan</i> |
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12:00 - 13:00: Catering - Tuesday lunch at Catering

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| 12:00 - 13:00
Lunch | Tuesday lunch |
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13:00 - 14:30: Research Papers - Foundations of Higher-Order Programming at L1**Chair(s): Gabriel Scherer**

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| 13:00 - 13:22
Talk | How to Prove Your Calculus Is Decidable: Practical Applications of Second-Order Algebraic Theories and Computation
<i>Makoto Hamana</i> |
| 13:22 - 13:45
Talk | A Relational Logic for Higher-Order Programs
<i>Alejandro Aguirre, Gilles Barthe, Marco Gaboardi, Deepak Garg, Pierre-Yves Strub</i> |
| 13:45 - 14:07
Talk | Foundations of Strong Call by Need
<i>Thibaut Balabonski, Pablo Barenbaum, Eduardo Bonelli, Delia Kesner</i> |
| 14:07 - 14:30
Talk | No-Brainer CPS Conversion
<i>Milo Davis, William Meehan, Olin Shivers</i> |

13:00 - 14:30: FSCD 2017 - Session 7 at L2

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| 13:00 - 13:30
Talk | Confluence of an extension of Combinatory Logic by Boolean constants
<i>Lukasz Czajka</i> |
| 13:30 - 14:00
Talk | Improving Rewriting Induction Approach for Proving Ground Confluence
<i>Takahito Aoto, Yoshihito Toyama, Yuta Kimura</i> |
| 14:00 - 14:30
Talk | The confluent terminating context-free substitutive rewriting system for the λ -calculus with surjective pairing and terminal type
<i>Yohji Akama</i> |

14:30 - 15:00: Catering - Tuesday coffee break 2 at Catering

14:30 - 15:00 Tuesday coffee break 2
Coffee break

15:00 - 16:00: FSCD 2017 - Session 8 at L2

15:00 - 15:30 Is the optimal implementation inefficient? Elementarily not
Talk Stefano Guerrini, Marco Solieri

15:30 - 16:00 Optimality and the Linear Substitution Calculus
Talk Pablo Barenbaum, Eduardo Bonelli

15:00 - 16:10: Research Papers - Tools for Verification at L1

Chair(s): Nikhil Swamy

15:00 - 15:23 Kami: A Platform for High-Level Parametric Hardware Specification and Its Modular
Talk Verification
Joonwon Choi, Muralidaran Vijayaraghavan, Benjamin Sherman, Adam Chlipala, Arvind

15:23 - 15:46 SpaceSearch: A Library for Building and Verifying Solver-Aided Tools
Talk Konstantin Weitz, Steven Lyubomirsky, Stefan Heule, Emina Torlak, Michael D. Ernst, Zachary Tatlock

15:46 - 16:10 Local Refinement Typing
Talk Benjamin Cosman, Ranjit Jhala

16:10 - 16:40: Catering - Tuesday coffee break 3 at Catering

16:10 - 16:40 Tuesday coffee break 3
Coffee break

16:40 - 17:50: Research Papers - Program Construction at L1

Chair(s): John Hughes

16:40 - 17:03 Compiling to Categories
Talk Conal Elliott

17:03 - 17:26 Visitors Unchained
Talk François Pottier

17:26 - 17:50 Staged Generic Programming
Talk Jeremy Yallop

16:40 - 18:10: FSCD 2017 - Session 9 at L2

16:40 - 17:10 Generalized Refocusing: from Hybrid Strategies to Abstract Machines
Talk Malgorzata Biernacka, Witold Charatonik, Klara Zielińska

17:10 - 17:40 Observably Deterministic Concurrent Strategies and Intensional Full Abstraction for
Talk Parallel-or
Simon Castellan, Pierre Clairambault, Glynn Winskel

17:40 - 18:10 Refutation of Sallé's Longstanding Conjecture
Talk Benedetto Intrigila, Giulio Manzonetto, Andrew Polonsky

17:50 - 18:20: Keynotes and Reports - Tuesday Closing Events at L1

17:50 - 18:20 Programming Contest Report
Talk Sam Lindley

Wed 6 Sep

09:00 - 09:37: Student Research Competition - SRC Presentations at L1

Chair(s): Ilya Sergey

09:00 - 09:37 <i>Awards</i>	Student Research Competition: Finalist Presentations
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09:00 - 10:00: FSCD 2017 - Session 10 at L2

09:00 - 10:00 Quantitative semantics for probabilistic programming
Talk *Christine Tasson*

09:37 - 10:00: Research Papers - Domain-Specific Languages at L1

Chair(s): Martin Erwig

09:37 - 10:00
Talk

Herbarium Racketensis: A Stroll through the Woods (Functional Pearl)
Vincent St-Amour, Daniel Feltey, Spencer P. Florence, Shu-Hung You, Robby Findler

10:00 - 10:30: Catering - Wednesday coffee break 1 at	Catering
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10:00 - 10:30 Wednesday coffee break 1
Coffee break

10:30 - 12:00: Research Papers - Dependently Typed Programming at L1

Chair(s): Dan Licata

10:30 - 10:52	A Specification for Dependent Types in Haskell
Talk	Stephanie Weirich, Antoine Voizard, Pedro Henrique Azevedo de Amorim, Richard A. Eisenberg

10:52 - 11:15 **Parametric Quantifiers for Dependent Type Theory**
Talk *Andreas Nuyts, Andrea Vezzosi, Dominique Devriese*

11:15 - 11:37 <i>Talk</i>	Normalization by Evaluation for Sized Dependent Types <i>Andreas Abel, Andrea Vezzosi, Theo Winterhalter</i>
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11:37 - 12:00 **A Metaprogramming Framework for Formal Verification**
Talk *Gabriel Ebner, Sebastian Ullrich, Jared Roesch, Jeremy Avigad, Leonardo De Moura*

10:30 - 12:00: FSCD 2017 - Session 11 at L2

10:30 - 11:00	Displayed categories
<i>Talk</i>	<i>Benedikt Ahrens, Peter Lefany Lumsdaine</i>

11:00 - 11:30	List Objects with Algebraic Structure
Talk	Marcelo Fiore, Philip Saville

11:30 - 12:00	There is only one notion of differentiation
Talk	Robin Cockett, Jean-Simon Lemay

12:00 - 13:00: Catering - Wednesday lunch at	Catering
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12:00 - 13:00	Wednesday lunch
Lunch	

13:00 - 14:30: Research Papers - Contracts and Sessions at L1**Chair(s): Matthew Flatt**

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| 13:00 - 13:22
<i>Talk</i> | Chaperone Contracts for Higher-Order Sessions
<i>Hernan Melgratti, Luca Padovani</i> |
| 13:22 - 13:45
<i>Talk</i> | Whip: Higher-Order Contracts for Modern Services
<i>Lucas Waye, Christos Dimoulas, Stephen Chong</i> |
| 13:45 - 14:07
<i>Talk</i> | Manifest Sharing with Session Types
<i>Stephanie Balzer, Frank Pfenning</i> |
| 14:07 - 14:30
<i>Talk</i> | Gradual Session Types
<i>Atsushi Igarashi, Peter Thiemann, Vasco Vasconcelos, Philip Wadler</i> |

13:00 - 14:30: FSCD 2017 - Session 12 at L2

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| 13:00 - 13:30
<i>Talk</i> | A Fibrational Framework for Substructural and Modal Logics
<i>Dan Licata, Michael Shulman, Mitchell Riley</i> |
| 13:30 - 14:00
<i>Talk</i> | Dinaturality between syntax and semantics
<i>Paolo Pistone</i> |
| 14:00 - 14:30
<i>Talk</i> | Models of Type Theory Based on Moore Paths
<i>Andrew Pitts, Ian Orton</i> |

14:30 - 15:00: Catering - Wednesday coffee break 2 at Catering

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| 14:30 - 15:00
<i>Coffee break</i> | Wednesday coffee break 2 |
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15:00 - 16:10: Research Papers - Integrating Static and Dynamic Typing at L1**Chair(s): Ronald Garcia**

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| 15:00 - 15:23
<i>Talk</i> | Theorems for Free for Free: Parametricity, With and Without Types
<i>Amal Ahmed, Dustin Jamner, Jeremy G. Siek, Philip Wadler</i> |
| 15:23 - 15:46
<i>Talk</i> | On Polymorphic Gradual Typing
<i>Yuu Igarashi, Taro Sekiyama, Atsushi Igarashi</i> |
| 15:46 - 16:10
<i>Talk</i> | Gradual Typing with Union and Intersection Types
<i>Giuseppe Castagna, Victor Lanvin</i> |

15:00 - 16:00: FSCD 2017 - Session 13 at L2

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| 15:00 - 15:30
<i>Talk</i> | Böhm Reduction in Infinitary Term Graph Rewriting Systems
<i>Patrick Bahr</i> |
| 15:30 - 16:00
<i>Talk</i> | Infinite Runs in Abstract Completion
<i>Nao Hirokawa, aart Middeldorp, Christian Sternagel, Sarah Winkler</i> |

16:10 - 16:40: Catering - Wednesday coffee break 3 at Catering

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| 16:10 - 16:40
<i>Coffee break</i> | Wednesday coffee break 3 |
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16:40 - 17:50: Research Papers - Inference and Analysis at L1**Chair(s):** Mark Jones

16:40 - 17:03 Constrained Type Families
Talk *J. Garrett Morris, Richard A. Eisenberg*

17:03 - 17:26 Automating Sized-Type Inference for Complexity Analysis
Talk *Martin Avanzini, Ugo Dal Lago*

17:26 - 17:50 Inferring Scope through Syntactic Sugar
Talk *Justin Pombrio, Shriram Krishnamurthi, Mitchell Wand*

16:40 - 17:10: FSCD 2017 - Session 14 at L2

16:40 - 17:10 Negative Translations and Normal Modality
Talk *Tadeusz Litak, Miriam Polzer, Ulrich Rabenstein*

17:10 - 17:20: FSCD 2017 - Termination and Complexity Competition 2017 at L2

17:10 - 17:20 Termination and Complexity Competition 2017
Other *Jürgen Giesl, Albert Rubio, Johannes Waldmann, Akihisa Yamada*

17:20 - 18:10: FSCD 2017 - FSCD General Meeting at L2

17:20 - 18:10 FSCD General Meeting
Meeting

17:50 - 18:00: Student Research Competition - SRC Awards at L1**Chair(s):** Ilya Sergey

17:50 - 18:00 Student Research Competition Awards
Awards *Ilya Sergey*

18:00 - 18:20: Keynotes and Reports - Wednesday Closing Events at L1

18:00 - 18:10 Program Chair's Report
Talk *Mark Jones*

18:10 - 18:20 ICFP 2018 Announcement
Talk *Robby Findler*

18:30 - 22:30: Social Events - Banquet at Weston Library

18:30 - 22:30 Banquet
Social Event

Thu 7 Sep**09:00 - 10:00: CUFP 2017 - CUFP Tutorials C1 at L6****Chair(s):** Runhang Li

09:00 - 10:00 Tutorial C1: Online Applications with Incremental
Other *Yaron Minsky, Sebastian Funk*

09:00 - 10:00: CUFP 2017 - CUFP Tutorials C2 at L5**Chair(s):** Runhang Li

09:00 - 10:00 Tutorial C2: Extensible Effects: understanding them, implementing them, using them
Other *Oleg Kiselyov*

09:00 - 10:00: Haskell 2017 - Day 1, Session 1 at L1

09:00 - 10:00 <i>Talk</i>	Ornaments: exploiting parametricity for safer, more automated code refactorization and code reuse (Invited Talk) <i>Didier Rémy</i>
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09:00 - 10:00: FSCD 2017 - Session 15 at L2

09:00 - 10:00	Type systems for the relational verification of higher order programs
<i>Talk</i>	<i>Marco Gaboardi</i>

09:00 - 09:05: ML 2017 - Welcome at L3

Chair(s): Sam Lindley

09:00 - 09:05	Welcome
<i>Day opening</i>	

09:00 - 09:10: FHPC 2017 - Welcome to FHPC'17 at L4

09:00 - 09:10 <i>Day opening</i>	Welcome to FHPC'17 <i>Phil Trinder, Cosmin Oancea</i>
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09:05 - 10:00: ML 2017 - Invited talk at L3

Chair(s): Sam Lindley

09:05 - 10:00	State machines all the way down
<i>Talk</i>	<i>Edwin Brady</i>

09:10 - 10:10: FHPC 2017 - First Keynote at L4

Chair(s): Kevin Hammond

09:10 - 10:10	Haskell in the Datacentre
<i>Talk</i>	<i>Simon Marlow</i>

10:00 - 10:30: Catering - Thursday coffee break 1 at **Catering**

10:00 - 10:30	Thursday coffee break 1
<i>Coffee break</i>	

10:30 - 11:30: CUFP 2017 - CUFP Tutorials C1 at L6

10:30 - 11:30	Tutorial C1: Online Applications with Incremental (part 2)
Talk	Yaron Minsky, Sebastian Funk

10:30 - 11:30: CUFP 2017 - CUFP Tutorials C2 at L5

10:30 - 11:30 <i>Talk</i>	Tutorial C2: Extensible Effects: understanding them, implementing them, using them (part 2) <i>Oleg Kiselyov</i>
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10:30 - 11:30: FHPC 2017 - Compilation at L4**Chair(s): Phil Trinder**

10:30 - 11:00 *Talk* From High-level Radio Protocol Specifications to Efficient Low-level Implementations via Partial Evaluation
Geoffrey Mainland, Siddhanathan Shanmugam

11:00 - 11:30 *Talk* Destination-Passing Style for Efficient Memory Management
Amir Shaikhha, Andrew Fitzgibbon, Simon Peyton Jones, Dimitrios Vytiniotis

10:30 - 11:30: Haskell 2017 - Day 1, Session 2 at L1

10:30 - 11:00 *Talk* Algebraic Graphs with Class (Functional Pearl)
Andrey Mokhov

11:00 - 11:30 *Talk* Packrats Parse in Packs
Mario Blažević, Jacques Légaré

10:30 - 11:59: FSCD 2017 - Session 16 at L2

10:30 - 11:00 *Talk* Arrays and References in Resource Aware ML
Benjamin Lichtman, Jan Hoffmann

11:00 - 11:30 *Talk* The Complexity of Principal Inhabitation
Andrej Dudenhefner, Jakob Rehof

11:30 - 11:59 *Talk* Types as Resources for Classical Natural Deduction
Delia Kesner, Pierre Vial

10:30 - 11:45: ML 2017 - Types and modules at L3

10:30 - 10:55 *Talk* Mergeable types
Gowtham Kaki, KC Sivaramakrishnan, Samodya Abey Siriwardane, Suresh Jagannathan

10:55 - 11:20 *Talk* Tierless modules
Gabriel Radanne, Jérôme Vouillon

11:20 - 11:45 *Talk* First-class subtypes
Jeremy Yallop, Stephen Dolan

11:20 - 12:00: Catering - Thursday coffee break 2 at Catering

11:20 - 12:00 *Coffee break* Thursday coffee break 2

12:00 - 12:30: CUFP 2017 - CUFP Tutorials C1 at L6

12:00 - 12:30 *Talk* Tutorial C1: Online Applications with Incremental (part 3)
Yaron Minsky, Sebastian Funk

12:00 - 12:30: CUFP 2017 - CUFP Tutorials C2 at L5

12:00 - 12:30 *Talk* Tutorial C2: Extensible Effects: understanding them, implementing them, using them (part 3)
Oleg Kiselyov

12:00 - 12:30: Haskell 2017 - Day 1, Session 3 at L1

12:00 - 12:30 *Talk* Ode on a Random Urn (Functional Pearl)
Leonidas Lampropoulos, Antal Spector-Zabusky, Kenneth Foner

12:00 - 12:30: FHPC 2017 - Tools at L4**Chair(s):** Cosmin Oancea

12:00 - 12:30 VisPar: Visualising dataflow graphs from the Par monad
Talk Maximilian Algehed, Patrik Jansson

12:00 - 12:25: ML 2017 - Verification at L3

12:00 - 12:25 VOCAL -- a verified OCaml Library
Talk Arthur Charguéraud, Jean-Christophe Filliatre, Mário Pereira, François Pottier

12:25 - 14:00: Catering - Thursday lunch at Catering

12:25 - 14:00 Thursday lunch
Lunch

14:00 - 15:00: CUFP 2017 - CUFP Tutorials C3 at L5**Chair(s):** Runhang Li

14:00 - 15:00 Tutorial C3: Concurrent Programming with Effect Handlers
Other Daniel Hillerström, KC Sivaramakrishnan

14:00 - 15:00: CUFP 2017 - CUFP Tutorials C4 at L6**Chair(s):** Runhang Li

14:00 - 15:00 Tutorial C4: Git under the hood with OCaml
Talk Romain Calascibetta

14:00 - 15:00: Haskell 2017 - Day 1, Session 4 at L1

14:00 - 14:30 QuickSpec: A Lightweight Theory Exploration Tool for Programmers (System
Demonstration Demonstration)
 Maximilian Algehed, Koen Claessen, Moa Johansson, Nicholas Smallbone

14:30 - 15:00 Speculate: Discovering Conditional Equations and Inequalities about Black-Box
Talk Functions by Reasoning from Test Results
 Rudy Braquehais, Colin Runciman

14:00 - 15:00: FHPC 2017 - Parallel Programming at L4**Chair(s):** Geoffrey Mainland

14:00 - 14:30 In Search of a Map: using Program Slicing to Discover Potential Parallelism in
Talk Recursive Functions
 Adam Barwell, Kevin Hammond

14:30 - 15:00 Strategies for Regular Segmented Reductions on GPU
Talk Rasmus Wriedt Larsen, Troels Henriksen

14:00 - 15:15: ML 2017 - Programming language design at L3

14:00 - 14:25 Typer: an infix statically typed Lisp
Talk Pierre Delaunay, Vincent Archambault-Bouffard, Stefan Monnier

14:25 - 14:50 Relational conversion for OCaml
Talk Petr Lozov, Dmitri Boulytchev

14:50 - 15:15 Towards abductive functional programming
Talk Koko Muroya

14:50 - 15:30: Catering - Thursday coffee break 3 at Catering

14:50 - 15:30 Thursday coffee break 3
Coffee break

15:30 - 16:20: CUFP 2017 - CUFP Tutorials C3 at L5

15:30 - 16:20 Tutorial C3: Concurrent Programming with Effect Handlers (part 2)
Talk
Daniel Hillerström, KC Sivaramakrishnan

15:30 - 16:20: CUFP 2017 - CUFP Tutorials C4 at L6

15:30 - 16:20 Tutorial C4: Git under the hood with OCaml (part 2)
Talk
Romain Calascibetta

15:30 - 16:30: Haskell 2017 - Day 1, Session 5 at L1

15:30 - 16:00 Using Coq to Write Fast and Correct Haskell
Talk
John Wiegley, Benjamin Delaware

16:00 - 16:30 A Tale of Two Provers: Verifying Monoidal String Matching in Liquid Haskell and Coq
Talk
Niki Vazou, Leonidas Lampropoulos, Jeff Polakow

15:30 - 16:30: FHPC 2017 - Demo Session at L4

Chair(s): Cosmin Oancea

15:30 - 15:59 Futhark Demo
Demonstration
Troels Henriksen

16:00 - 16:29 ParaFormance Demo: Democratizing Parallel Software Development
Demonstration
Christopher Brown, Kevin Hammond

16:30 - 16:50 Break 16:30 - 16:50: Wine and Nibbles @ North Mezzanine
Social Event

15:30 - 16:20: ML 2017 - Performance at L3

15:30 - 15:55 Making SML# a general-purpose high-performance language
Talk
Atsushi Ohori, Kenjiro Taura, Katsuhiko Ueno

15:55 - 16:20 Efficient representation of large, dynamic sequences in ML
Talk
Arthur Charguéraud, Mike Rainey

16:20 - 16:50: Catering - Thursday coffee break 4 at Catering

16:20 - 16:50 Thursday coffee break 4
Coffee break

16:50 - 17:30: CUFP 2017 - CUFP Tutorials C3 at L5

16:50 - 17:30 Tutorial C3: Concurrent Programming with Effect Handlers (part 3)
Talk
Daniel Hillerström, KC Sivaramakrishnan

16:50 - 17:30: CUFP 2017 - CUFP Tutorials C4 at L6

16:50 - 17:30 Tutorial C4: Git under the hood with OCaml (part 3)
Talk
Romain Calascibetta

16:50 - 17:50: Haskell 2017 - Day 1, Session 6 at L1

16:50 - 17:20 A Meta-EDSL for Distributed Web Applications
Talk *Anton Ekblad*

17:20 - 17:50 Composable Network Stacks and Remote Monads
Talk *Justin Dawson, Mark Grebe, Andy Gill*

16:50 - 17:50: FHPC 2017 - Demo and Panel at L4**Chair(s): Phil Trinder**

16:50 - 17:20 Ziria Demo: Wringing performance from high-level code
Demonstration *Siddhanathan Shanmugam, Geoffrey Mainland*

17:20 - 17:50 Panel Discussion: The challenges for Functional High Performance Computing
Day closing *Geoffrey Mainland, Kevin Hammond, Simon Marlow*

16:50 - 17:40: ML 2017 - Effects at L3

16:50 - 17:15 Effects without monads: non-determinism
Talk *Oleg Kiselyov*

17:15 - 17:40 Effectively tackling the awkward squad
Talk *Stephen Dolan, Spiros Eliopoulos, Daniel Hillerström, Anil Madhavapeddy, KC Sivaramakrishnan, Leo White*

18:15 - 20:30: Social Events - Industry Reception at Ashmolean Museum

18:15 - 20:30 Industry Reception
Social Event

Fri 8 Sep**09:00 - 10:00: CUFP 2017 - CUFP Tutorials C5 at L6****Chair(s): Runhang Li**

09:00 - 10:00 Tutorial C5: Teaching Functional Programming
Talk *Michael Sperber*

09:00 - 10:00: CUFP 2017 - CUFP Tutorials C6 at L5**Chair(s): Runhang Li**

09:00 - 10:00 Tutorial C6: Transducers in Practice
Talk *Renzo Borgatti*

09:00 - 10:00: Haskell 2017 - Day 2, Session 1 at L1

09:00 - 10:00 Algorithmic Music in Haskell (Invited Talk)
Talk *Donya Quick*

09:00 - 09:10: OCaml 2017 - Opening at L3

09:00 - 09:05 Opening
Day opening *Gabriel Scherer*

09:00 - 09:10: Erlang 2017 - Opening & Welcome at L4

09:00 - 09:10 Opening & Welcome
Day opening

09:10 - 10:00: Erlang 2017 - Keynote Invited Talk at L4

09:10 - 10:00 Keynote
Talk *Martin Sumner*

09:10 - 10:10: OCaml 2017 - Talk session 1 at L3

09:05 - 09:40 Invited talk: new contributors
Talk *David Allsopp, Florian Angeletti, Sébastien Hinderer*

09:40 - 10:05 The State of the OCaml Platform: September 2017
Talk *Anil Madhavapeddy*

10:00 - 10:30: Catering - Friday coffee break 1 at Catering

10:00 - 10:30 Friday coffee break 1
Coffee break

10:30 - 11:30: CUFP 2017 - CUFP Tutorials C5 at L6

10:30 - 11:30 Tutorial C5: Teaching Functional Programming (part 2)
Talk *Michael Sperber*

10:30 - 11:30: CUFP 2017 - CUFP Tutorials C6 at L5

10:30 - 11:30 Tutorial C6: Transducers in Practice (part 2)
Talk *Renzo Borgatti*

10:30 - 11:30: Haskell 2017 - Day 2, Session 2 at L1

10:30 - 11:00 Well-Typed Music Does Not Sound Wrong (Experience Report)
Talk *Dmitrij Szamozvancev, Michael Gale*

11:00 - 11:30 Back to the Future: Time Travel in FRP
Talk *Ivan Perez*

10:30 - 11:20: Erlang 2017 - Session 2 at L4

10:30 - 10:55 Construction and Formal Verification of a Fault-Tolerant Distributed Mutual Exclusion Algorithm
Talk *Evgeniy Shishkin*

10:55 - 11:20 Towards an Isabelle/HOL Formalisation of Core Erlang
Talk *Joseph Harrison*

10:30 - 11:30: OCaml 2017 - Talk session 2 at L3

10:30 - 10:50 Owl: A General-Purpose Numerical Library in OCaml
Talk *Liang Wang*

10:50 - 11:10 Extending OCaml's open
Talk *Runhang Li, Jeremy Yallop*

11:10 - 11:30 Genspio: Generating Shell Phrases In OCaml
Talk *Sebastien Mondet*

11:20 - 12:00: Catering - Friday coffee break 2 at Catering

11:20 - 12:00 Friday coffee break 2
Coffee break

11:35 - 12:30: OCaml 2017 - Poster session at L3

11:35 - 11:45 Flash poster presentation
Talk

11:45 - 12:30 mSAT: An OCaml SAT Solver
Talk
Bury Guillaume

11:45 - 12:30 Jbuilder: a modern approach to OCaml development
Talk
Jeremie Dimino, Mark Shinwell

11:45 - 12:30 Tyre – Typed Regular Expressions
Talk
Gabriel Radanne

11:45 - 12:30 ocaml: Interpreted OCaml
Talk
John Whittington

12:00 - 12:30: CUFP 2017 - CUFP Tutorials C5 at L6

12:00 - 12:30 Tutorial C5: Teaching Functional Programming (part 3)
Talk
Michael Sperber

12:00 - 12:30: CUFP 2017 - CUFP Tutorials C6 at L5

12:00 - 12:30 Tutorial C6: Transducers in Practice (part 3)
Talk
Renzo Borgatti

12:00 - 12:30: Haskell 2017 - Day 2, Session 3 at L1

12:00 - 12:30 The Linearity Monad
Talk
Jennifer Paykin, Steve Zdancewic

12:00 - 12:25: Erlang 2017 - Session 3 at L4

12:00 - 12:25 Erlang and Elixir development news
Talk

12:25 - 14:00: Catering - Friday lunch at Catering

12:25 - 14:00 Friday lunch
Lunch

14:00 - 15:00: CUFP 2017 - CUFP Tutorials C7 at L6

Chair(s): Runhang Li

14:00 - 15:00 Tutorial C7: Owl - Data Science in OCaml
Talk
Liang Wang

14:00 - 15:00: CUFP 2017 - CUFP Tutorials C8 at L5

Chair(s): Runhang Li

14:00 - 15:00 Tutorial C8: GraphQL Servers in OCaml
Talk
Andreas Garnæs

14:00 - 15:00: Haskell 2017 - Day 2, Session 4 at L1

14:00 - 14:30 Elaboration on Functional Dependencies
Talk
Georgios Karachalias, Tom Schrijvers

14:30 - 15:00 Quantified Class Constraints
Talk
Gert-Jan Bottu, Georgios Karachalias, Tom Schrijvers, Bruno C. d. S. Oliveira, Philip Wadler

14:00 - 14:50: Erlang 2017 - Session 4 at L4

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| 14:00 - 14:25
Talk | Distributed Memory Architecture for High-Level Synthesis of Embedded Controllers from Erlang
<i>Kagumi Azuma, Nagisa Ishiura, Nobuaki Yoshida, Hiroyuki Kanbara</i> |
| 14:25 - 14:50
Talk | Structuring Erlang BEAM control flow
<i>Dániel Lukács, Melinda Toth</i> |

14:00 - 15:00: OCaml 2017 - Talk session 3 at L3

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|-----------------------|---|
| 14:00 - 14:20
Talk | ROTOR: First Steps Towards a Refactoring Tool for OCaml
<i>Reuben N. S. Rowe, Simon Thompson</i> |
| 14:20 - 14:40
Talk | A memory model for multicore OCaml
<i>Stephen Dolan, KC Sivaramakrishnan</i> |
| 14:40 - 15:00
Talk | Bioinformatics, The Typed Tagless Final Way
<i>Sebastien Mondet</i> |

14:50 - 15:30: Catering - Friday coffee break 3 at Catering

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| 14:50 - 15:30
Coffee break | Friday coffee break 3 |
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15:30 - 16:20: CUFP 2017 - CUFP Tutorials C7 at L6

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| 15:30 - 16:20
Talk | Tutorial C7: Owl - Data Science in OCaml (part 2)
<i>Liang Wang</i> |
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15:30 - 16:20: CUFP 2017 - CUFP Tutorials C8 at L5

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| 15:30 - 16:20
Talk | Tutorial C8: GraphQL Servers in OCaml (part 2)
<i>Andreas Garnæs</i> |
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15:30 - 16:30: Haskell 2017 - Day 2, Session 5 at L1

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| 15:30 - 16:00
Talk | Hardware Software Co-Design in Haskell
<i>Markus Aronsson, Mary Sheeran</i> |
| 16:00 - 16:30
Talk | Streaming Irregular Arrays
<i>Robert Clifton-Everest, Trevor L. McDonell, Manuel Chakravarty, Gabriele Keller</i> |

15:30 - 16:20: Erlang 2017 - Session 5 at L4

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| 15:30 - 15:55
Talk | The Shared-Memory Interferences of Erlang/OTP Built-ins
<i>Stavros Aronis, Kostis Sagonas</i> |
| 15:55 - 16:20
Talk | Towards Change-driven Testing
<i>Viktória Fördős, István Bozó, Melinda Toth</i> |

15:30 - 16:30: OCaml 2017 - Talk session 4 at L3

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| 15:30 - 15:50
Talk | A B-tree library for OCaml
<i>Tom Ridge</i> |
| 15:50 - 16:10
Talk | Wodan: a pure OCaml, flash-aware filesystem library
<i>Gabriel de Perthuis</i> |
| 16:10 - 16:30
Talk | Tezos: the OCaml Crypto-Ledger
<i>Benjamin Canou, Grégoire Henry, Pierre Chambart, Fabrice Le Fessant, Arthur BREITMAN</i> |

16:20 - 16:50: Catering - Friday coffee break 4 at Catering

16:20 - 16:50 Friday coffee break 4
Coffee break

16:50 - 17:30: CUFP 2017 - CUFP Tutorials C7 at L6

16:50 - 17:30 Tutorial C7: Owl - Data Science in OCaml (part 3)
Talk Liang Wang

16:50 - 17:30: CUFP 2017 - CUFP Tutorials C8 at L5

16:50 - 17:30 Tutorial C8: GraphQL Servers in OCaml (part 3)
Talk Andreas Garnæs

16:50 - 17:50: Haskell 2017 - Day 2, Session 6 at L1

16:50 - 17:20 Improving STM Performance with Transactional Structs
Talk Ryan Yates, Michael Scott

17:20 - 17:50 Adaptive Lock-Free Data Structures in Haskell: A General Method for Concurrent
 Implementation Swapping
Talk Chao-Hong Chen, Vikraman Choudhury, Ryan R. Newton

16:50 - 17:50: Erlang 2017 - Session 6 at L4

16:50 - 17:20 eAOP - An Aspect Oriented Programming Framework for Erlang
Talk Ian Cassar, Adrian Francalanza, Luca Aceto, Anna Ingolfsdottir

17:20 - 17:50 In medias res: WIP discussion
Talk

16:50 - 17:40: OCaml 2017 - Talk session 5 at L3

17:00 - 17:20 Component-based Program Synthesis in OCaml
Talk Zhanpeng Liang, Kanae Tsushima

17:20 - 17:40 Testing with Crowbar
Talk Stephen Dolan, Mindy Preston

Sat 9 Sep**09:00 - 09:10: FARM 2017 - Introduction at L3**

09:00 - 09:10 Welcome
Day opening Michael Sperber, Jean Bresson

09:00 - 10:10: HIW 2017 - State of GHC at L1
Chair(s): Richard A. Eisenberg

09:00 - 09:30 Progress on GHC
Talk Simon Peyton Jones

09:30 - 10:00 GHC Infrastructure Update and Discussion
Talk Ben Gamari

10:00 - 10:10 Getting Ready for Hadrian
Talk Andrey Mokhov, Zhen Zhang, Ben Gamari, Neil Mitchell

09:10 - 10:00: CUFP 2017 - CUFP Talks 1 at L2

09:10 - 09:35 Keynote: Are We There Yet?
Talk *Bodil Stokke*

09:35 - 10:00 Bonsai: a DSL for serverless firm real-time decisioning
Talk *Jeremie Lasalle-Ratelle*

09:10 - 10:00: FARM 2017 - Session 1: Papers/Demos at L3**Chair(s): Jean Bresson**

09:10 - 09:40 A Categorical Grammar for Music and Its Use in Automatic Melody Generation
Talk *Halley Young*

09:40 - 10:00 Demo — Representation of Musical Notation in Haskell
Demonstration *Edward Lilley*

10:00 - 10:30: Catering - Saturday coffee break 1 at Catering

10:00 - 10:30 Saturday coffee break 1
Coffee break

10:30 - 11:20: CUFP 2017 - CUFP Talks 2 at L2

10:30 - 10:55 Interfacing OCaml and Rust: picking the right tool for the job
Talk *Joris Giovannangeli*

10:55 - 11:20 Distributed load testing with MZBench
Talk *Renat Idrisov*

10:30 - 11:30: HIW 2017 - Compiling to LLVM at L1**Chair(s): Jan Stolarek**

10:30 - 10:55 Native Support for Explicit Stacks in LLVM
Talk *Kavon Farvardin, Simon Peyton Jones*

10:55 - 11:20 SimplexHC: Lowering High-Level Haskell to Imperative IR
Talk *Siddharth Bhat*

11:20 - 11:30 Lightning Talk Slot #1
Talk

10:30 - 11:30: FARM 2017 - Session 2: Papers/Demos at L3**Chair(s): Ivan Perez**

10:30 - 10:50 Demo — African Polyphony and Polyrhythm
Demonstration *Chris Ford*

10:50 - 11:10 Demo — Vivid: Sound Synthesis with Haskell and SuperCollider
Demonstration *Tom Murphy*

11:10 - 11:40 GALE: A Functional Graphic Adventure Library and Engine
Talk *Ivan Perez*

11:20 - 12:00: Catering - Saturday coffee break 2 at Catering

11:20 - 12:00 Saturday coffee break 2
Coffee break

12:00 - 12:25: CUFP 2017 - CUFP Talks 3 at L2

12:00 - 12:25 Gens N' Roses: Appetite for Reduction
Talk *Jacob Stanley*

12:00 - 12:25: HIW 2017 - Constraints at L1**Chair(s): Ben Gamari**

12:00 - 12:25 On Unsatisfiability
Talk *J. Garrett Morris*

12:00 - 12:30: FARM 2017 - Session 3: Paper at L3**Chair(s): Michael Sperber**

12:00 - 12:30 Modelling the Way Mathematics Is Actually Done
Talk *Joe Corneli, Ursula Martin, Dave Murray-Rust, Alison Pease, Raymond Puzio, Gabriela Rino Nesin*

12:25 - 14:00: Catering - Saturday lunch at Catering

12:25 - 14:00 Saturday lunch
Lunch

14:00 - 14:50: CUFP 2017 - CUFP Talks 4 at L2

14:00 - 14:25 Formally Verifying a Smart-Contract Language Implementation with Isabelle
Talk *Simon Meier*

14:25 - 14:50 Haskell games and apps for iOS and Android
Talk *Ivan Perez*

14:00 - 15:00: FARM 2017 - Session 4: Tutorial at L3**Chair(s): Jean Bresson**

14:00 - 15:00 FAUST Tutorial for Functional Programmers
Talk *Yann Orlarey, Stéphane Letz, Dominique Fober, Romain Michon*

14:00 - 15:00: HIW 2017 - Working in Core at L1**Chair(s): Adam Gundry**

14:00 - 14:25 Why GHC Core and Linear Logic Should be Best Friends
Talk *Carter Schonwald, Joel Burget*

14:25 - 14:50 Demand Analysis vs. Call Arity
Talk *Sebastian Graf*

14:50 - 15:00 Lightning Talk Slot #2
Talk

14:50 - 15:30: Catering - Saturday coffee break 3 at Catering

14:50 - 15:30 Saturday coffee break 3
Coffee break

15:30 - 16:20: CUFP 2017 - CUFP Talks 5 at L2

15:30 - 15:55 Using Haskell to run a datacenter
Talk *Pavlo Kerestey*

15:55 - 16:20 Functional Facades over Legacy Code
Talk *Nicholas Cowle, Robin Kay*

15:30 - 16:20: FARM 2017 - Session 5: Demos at L3**Chair(s):** David Janin

15:30 - 15:50 <i>Demonstration</i>	Demo — The Arpeggigon: A Functional Reactive Musical Automaton <i>Henrik Nilsson</i>
15:50 - 16:10 <i>Demonstration</i>	Demo — Ait: A Concatenative Language for Creative Programming <i>Stian Veum Møllersen</i>

15:30 - 16:30: HIW 2017 - Tool Support at L1**Chair(s):** Wren Romano

15:30 - 15:55 <i>Talk</i>	IDE Support in GHC <i>Alan Zimmerman</i>
15:55 - 16:20 <i>Talk</i>	Tracking GHC Performance <i>Mathieu Boespflug, Manuel Chakravarty</i>
16:20 - 16:30 <i>Talk</i>	Lightning Talk Slot #3

16:20 - 16:50: Catering - Saturday coffee break 4 at Catering

16:20 - 16:50 <i>Coffee break</i>	Saturday coffee break 4
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16:50 - 17:50: HIW 2017 - All Broken Up at L1**Chair(s):** Bartosz Nitka

16:50 - 17:15 <i>Talk</i>	An Experiment in Fragment-Based Code Distribution <i>Philipp Schuster</i>
17:15 - 17:50 <i>Talk</i>	Lightning Talk Slot #4

16:50 - 17:40: CUFP 2017 - CUFP Talks 6 at L2

16:50 - 17:15 <i>Talk</i>	Building the largest payment sandbox on a tiny machine <i>Máté Marjai</i>
17:15 - 17:40 <i>Talk</i>	Using Functional Programming to Accelerate Translational Research at Pfizer <i>Austin Huang</i>

16:50 - 17:40: FARM 2017 - Session 6: Papers/Demos at L3**Chair(s):** Henrik Nilsson

16:50 - 17:20 <i>Talk</i>	Unified Media Programming: An Algebraic Approach <i>Simon Archipoff, David Janin</i>
17:20 - 17:40 <i>Demonstration</i>	Demo — Octopus: A High-Level Fast 3D Animation Language <i>Simon Archipoff, David Janin</i>

19:30 - 22:00: Social Events - FARM Performance Evening at Old Fire Station

19:30 - 22:00 <i>Social Event</i>	FARM Evening Of Algorithmic Arts
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