# PLI 2000

## Principles, Logics, and Implementations of high-level programming languages

Montréal, Canada
September 17–22, 2000

 -SIGPLAN

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|---|---|
| **ICFP** | International Conference on Functional Programming |
| **PPDP** | 2nd International Conference on Principles and Practice of Declarative Programming |
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| **Haskell** | Workshop |
| **HLCL** | 4th International Workshop on High-Level Concurrent Languages |
| **HOOTS** | 4th International Workshop on Higher Order Operational Techniques in Semantics |
| **RULE** | 1st International Workshop on Rule-Based Programming |
| **Scheme** | Workshop on Scheme and Functional Programming |
| **SAIG** | Semantics, Applications and Implementation of Program Generation |
| **TIC** | 3rd International Workshop on Types in Compilation |

| | Sep 17 Sun | Sep 18 Mon | Sep 19 Tue | Sep 20 Wed | Sep 21 Thu | Sep 22 Fri |
|---|---|---|---|---|---|---|
| Ballroom | | | **ICFP** | | **PPDP** | |
| Hibiscus | **Haskell** | | **RULE** | **HLCL** | | **HOOTS** |
| Dahlia | **lunch** | **reception** | | **SAIG** | **TIC** | |
| Jasmine | **Scheme** | | | | | |
| Chez Chin | | **lunch** | **lunch** | **lunch** | **lunch** | **lunch** |
| Marché Bonsecours | | | | **banquet** | | |

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## ICFP Program
## Monday September 18

**8:45–9:45 Invited Speaker: *The Functional Guts of the Kleisli Query System*, Limsoon Wong (Kent Ridge Digital Labs)**
**Chair:** Philip Wadler

**9:45–10:15 Break**

**10:15–11:15 Session I**
**Chair:** Shriram Krishnamurthi
**10:15–10:45** *Regular Expression Types for XML*, Haruo Hosoya, Jérôme Vouillon, Benjamin Pierce (University of Pennsylvania)
**10:45–11:15** *The Influence of Browsers on Evaluators*, Christian Queinnec (Université Paris 6)

**11:30–12:30 Session II**
**Chair:** Andrew Wright
**11:30–12:00** *Static Enforcement of Security with Types*, Christian Skalka, Scott Smith (The Johns Hopkins University)
**12:00–12:30** *Information Flow Inference For Free*, François Pottier, Sylvain Conchon (INRIA)

**12:30–14:00 Lunch**

**14:00–15:30 Session III**
**Chair:** Greg Morrisett
**14:00–14:30** *Type-Safe Cast (Functional pearl)*, Stephanie Weirich (Cornell University)
**14:30–15:00** *Typed Compilation of Inclusive Subtyping*, Karl Crary (Carnegie Mellon University)
**15:00–15:30** *Fully Reflexive Intensional Type Analysis*, Valery Trifonov, Bratin Saha, Zhong Shao (Yale

University)

**15:30–16:00 Break**

**16:00–17:30 Session IV**
**Chair:** Atsushi Ohori
**16:00–16:30** *More Types for Nested Data Parallel Programming*, Manuel Chakravarty (University of New South Wales), Gabriele Keller (University of Technology, Sydney)
**16:30–17:00** *FranTk – A declarative GUI language for Haskell*, Meurig Sage (University of Glasgow)
**17:00–17:30** *Functional Programming in C++*, Yannis Smaragdakis, Brian McNamara (Georgia Institute of Technology)

**17:30–17:45 Program chair's report, plus a teaser**
*Breadth-First Numbering: Lessons from a Small Exercise in Algorithm Design (I), (Functional pearl)*, Chris Okasaki (Columbia University)

**19:00–20:30 Reception** celebrating the 10th anniversary of the Journal of Functional Programming hosted by ICFP and Cambridge University Press

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**ICFP Program**
**Tuesday September 19**

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**8:45–9:45 Invited Speaker:** *Advanced Module Systems: A Guide for the Perplexed*, **Benjamin Pierce (University of Pennsylvania)**
**Chair:** Xavier Leroy

**9:45–10:15 Break**

**10:15–11:15 Session V**
**Chair:** Richard Bird
**10:15–10:45** *Breadth-First Numbering: Lessons from a Small Exercise in Algorithm Design (II) (Functional pearl)*, Chris Okasaki (Columbia University)
**10:45–11:15** *Calculating Linear Time Algorithms for Solving Maximum Weightsum Problems*, Isao Sasano, Zhenjiang Hu, Masato Takeichi (University of Tokyo), Mizuhito Ogawa (NTT)

**11:30–12:30 Session VI**
**Chair:** Susan Eisenbach
**11:30–12:00** *Cheap Eagerness: Speculative Evaluation in a Lazy Functional Language*, Karl-Filip Faxen (KTH, Stockholm)
**12:00–12:30** *An Operational Semantics for Parallel Lazy Evaluation*, Clem Baker-Finch (University of Canberra), David King (Motorola Labs), Phil Trinder (Heriot-Watt University)

**12:30–14:00 Lunch**

**14:00–15:30 Session VII**
**Chair:** Eugenio Moggi
**14:00–14:30** *Recursive Monadic Bindings*, Levent Erkök, John Launchbury (Oregon Graduate Institute)
**14:30–15:00** *Deriving Backtracking Monad Transformers (Functional pearl)*, Ralf Hinze (Universität Bonn)
**15:00–15:30** *Intersection Types and Computational Effects*, Rowan Davies, Frank Pfenning (Carnegie Mellon University)

**15:30–16:00 Break**

**16:00–17:30 Session VIII**
**Chair:** Ralf Hinze
**16:00–16:30** *Syntactic Accidents in Program Analysis: On the Impact of the CPS Transformation*, Olivier Danvy, Daniel Damian (BRICS, University of Aarhus)
**16:30–17:00** *Recursive Types for Dummies (Functional pearl)*, Vladimir Gapeyev, Michael Levin, Benjamin Pierce (University of Pennsylvania)
**17:00–17:30** *The Duality of Computation*, Pierre-Louis Curien (CNRS and Université Paris 7), Hugo Herbelin (INRIA)

**17:30–18:00 Programming Contest Award Presentations**
**Chair:** Greg Morrisett

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**ICFP Program**
**Wednesday September 20**

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**8:45–9:45 Invited Speaker:** *Combining Functional Programming and Hardware Verification*, **Carl Seger (Intel)**
**Chair:** Andrew Wright

**9:45–10:15 Break**

**10:15–11:15 Session IX**
**Chair:** Xavier Leroy
**10:15–10:45** *Understanding Memory Allocation of Scheme Programs*, Manuel Serrano (University of Nice), Hans-J Boehm (Hewlett-Packard)
**10:45–11:15** *Non-stop Haskell*, Tony Field, Andy Cheadle (Imperial College), Simon Marlow, Simon Peyton-Jones (Microsoft Research), Lyndon While (University of Western Australia)

**11:30–12:30 Session X**
**Chair:** Philip Wadler
**11:30–12:00** *QuickCheck, A Lightweight Tool for Random Testing of Haskell Programs*, Koen Claessen, John Hughes (Chalmers University of Technology)
**12:00–12:30** *Composing contracts: an adventure*

*in financial engineering (Functional pearl)*, Simon Peyton-Jones (Microsoft Research), Jean-Marc Eber (LexiFi Technologies), Julian Seward (Glasgow University)

**12:30–14:00 Lunch**

**19:00–22:00 PLI Conference Banquet** at the Marché Bonsecours

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**PPDP Program**
**Wednesday September 20**

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**12:30–14:00 Lunch**

**14:20–14:30 Opening**

**14:30–15:30 Invited Speaker:** *From Logic to Stochastic Processes*, **Prakash Panangaden (McGill University)**
**Chair:** Maurizio Gabbrielli

**15:30–16:00 Break**

**16:00–18:00 Session I**
**Chair:** Frank Pfenning
**16:00–16:30** *A Parallel Implementation for Optimal Lambda-Calculus Reduction*, Marco Pedicini (Consiglio Nazionale delle Ricerche), Francesco Quaglia (Università di Roma)
**16:30–17:00** *Logical Relations, Data Abstraction, and Structured Fibrations*, John Power (University of Edinburgh), Edmund Robinson (Queen Mary & Westfield College)
**17:00–17:30** *Operational Semantics and Extensionality*, Simona Ronchi Della Rocca (Università di Torino)
**17:30–18:00** *A High Performance Erlang System*, Erik Johansson, Mikael Pettersson, Konstantinos Sagonas (Uppsala University)

**19:00–22:00 PLI Conference Banquet** at the Marché Bonsecours

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**PPDP Program**
**Thursday September 21**

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**8:30–9:30 Invited Speaker:** *Concurrent Constraint Programming and Linear Logic*, **François Fages (INRIA Rocquencourt)**
**Chair:** Franck van Breugel

**9:35–10:35 Session II**
**Chair:** Andrew Gordon
**9:35–10:05** *A Framework for the Recursive Definition of Data Structures*, Jean-Louis Giavitto (Université de Paris-Sud)
**10:05–10:35** *Declarative Event-Oriented Programming*, Conal Elliott (Microsoft Research)

**10:35–11:00 Break**

**11:00–12:30 Session III**
**Chair:** Michael Hanus
**11:00–11:30** *Linear Logic Programming with Ordered Contexts*, Jeff Polakow (Carnegie Mellon University)
**11:30–12:00** *Proof Construction and Non-Commutativity: a Cluster Calculus*, Claudia Faggian (Institut de Mathématiques de Luminy)
**12:00–12:30** *A Bottom-up Semantics for LO*, Marco Bozzano, Giorgio Delzanno, Maurizio Martelli (Università di Genova)

**12:30–14:00 Lunch**

**14:00–15:30 Session IV**
**Chair:** Radhia Cousot
**14:00–14:30** *Enhanced Sharing Analysis Technique: A Comprehensive Evaluation*, Roberto Bagnara, Enea Zaffanella (University of Parma), Patricia M. Hill (University of Leeds)
**14:30–15:00** *A Characterization of Symmetric Semantics by Domain Complementation*, Roberto Giacobazzi, Isabella Mastroeni (Università di Verona)
**15:00–15:30** *Concurrent Constraint Programming: Towards Probabilistic Abstract Interpretation*, Alessandra Di Pierro (Università di Pisa), Herbert Wiklicky (Imperial College)

**15:30–16:00 Break**

**16:00–17:00 Session V**
**Chair:** Claude Kirchner
**16:00–16:30** *A Model for Comparing the Space Usage of Lazy Evaluators*, Adam Bakewell, Colin Runciman (University of York)
**16:30–17:00** *Higher Order Unification via $\lambda s_e$-Style of Explicit Substitution*, Mauricio Ayala-Rincon (Universidade de Brasília), Fairouz Kamareddine (Heriot-Watt University)

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**PPDP Program**
**Friday September 22**

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**8:30–9:30 Invited Speaker:** *Proof-Carrying Code: Design, Implementation and Applications*, **George Necula (University of California, Berkeley)**
**Chair:** Greg Morrisett

**9:35–10:35 Session VI**
**Chair:** Gopalan Nadathur
**9:35–10:05** *Justifying Proofs using Memo Tables*, Abhik Roychoudhury, C.R. Ramakrishnan, I.V. Ramakrishnan (SUNY Stony Brook)

**10:05–10:35** *Semantic Analysis of Pointer Aliasing, Allocation and Disposal in Hoare Logic*, Cristiano Calcagno (Queen Mary & Westfield College and University of Genova), Samin Ishtiaq, Peter W. O'Hearn (Queen Mary & Westfield College)

**10:35–11:00 Break**

**11:00–12:30 Session VII**
**Chair:** François Fages
**11:00–11:30** *Type-based Nondeterminism Checking in Functional Logic Programs*, Michael Hanus, Frank Steiner (Christian-Albrechts-Universität Kiel)
**11:30–12:00** *A Precise Type Analysis of Logic Programs*, Lunjin Lu (The Oakland University)
**12:00–12:30** *Efficient Abstract Interpretation using Component-Wise Homomorphism*, Jörg Köller, Markus Mohnen (RWTH Aachen)

**12:30–14:00 Lunch**

**14:00–15:30 Session VIII**
**Chair:** Amy Felty
**14:00–14:30** *Extending Constraint Logic Programming with Open Functions*, Nikolay Pelov, Maurice Bruynooghe (K.U. Leuven)
**14:30–15:00** *Efficient Memory Management in a Single Stack Prolog Machine*, Xining Li (Lakehead University)
**15:00–15:30** *Continuations for Parallel Logic Programming*, Eneia Todoran (Technical University of Cluj-Napoca), Nikolaos S. Papaspyrou (National Technical University of Athens)

**15:30–16:00 Break**

**16:00–17:30 Session IX**
**Chair:** Patricia M. Hill
**16:00–16:30** *Solving Coverability Problems of Petri Nets by Partial Deduction*, Michael Leuschel, Helko Lehmann (University of Southampton)
**16:30–17:00** *Symmetric Monoidal Sketches*, Martin Hyland (University of Cambridge), John Power (University of Edinburgh)
**17:00–17:30** *Modular Reseting of Synchronous Data-flow Programs*, Gregoire Hamon, Marc Pouzet (Laboratoire d'informatique de Paris 6)

**17:30–17:40 Closing**

## ICFP Conference Committee

**General Chair:** Martin Odersky, *EPFL Lausanne*
**Program Chair:** Philip Wadler, *Bell Labs, Lucent Technologies*
**Local Host:** Marc Feeley, *Université de Montréal*
**Publicity Chair:** Konstantin Läufer, *Loyola University Chicago*

**Program Committee:**
Richard Bird, *Oxford University*
Craig Chambers, *University of Washington*
Charles Consel, *IRISA*
Susan Eisenbach, *Imperial College*
Fergus Henderson, *University of Melbourne*
Ralf Hinze, *Universität Bonn*
Shriram Krishnamurthi, *Rice University*
Xavier Leroy, *INRIA & Trusted Logic*
Eugenio Moggi, *Università di Genova*
Greg Morrisett, *Cornell University*
Atsushi Ohori, *JAIST*
Catuscia Palamidessi, *Pennsylvania State University*
Andrew Wright, *InterTrust*

## PPDP Conference Committee

**Conference Chair:** Franck van Breugel, *York University*
**Program Co-Chairs:**
Maurizio Gabbrielli, *Università di Udine*
Frank Pfenning, *Carnegie Mellon University*
**Program Committee:**
Samson Abramsky, *University of Edinburgh*
Zena Ariola, *University of Oregon*
Andrea Asperti, *Università di Bologna*
Frank de Boer, *Universiteit Utrecht*
Radhia Cousot, *Ecole Polytechnique*
Danny De Schreye, *K.U. Leuven*
Saumya Debray, *University of Arizona*
Thom Frühwirth, *LMU München*
Andrew Gordon, *Microsoft Research*
Doug Howe, *Carleton University*
Claude Kirchner, *LORIA & INRIA Nancy*
Naoki Kobayashi, *University of Tokyo*
Michael Maher, *Griffith University*
Greg Morrisett, *Cornell University*
Robert Nieuwenhuis, *Universitat Politècnice de Catalunya*
Christine Paulin, *LRI-Université Paris Sud*
Paul Tarau, *University of North Texas*
German Vidal, *Universidad Politècnica de Valencia*

## Sponsorship

**Workshop Chair:** Amy Felty, *University of Ottawa*

**Haskell Program**
**Sunday September 17**

**8:30–10:00 Session I**
**Chair:** Graham Hutton
**8:30–9:00** *Lambada, Haskell as a Better Java*, Erik Meijer (Universiteit Utrecht), Sigbjørn Finne (Microsoft Research)
**9:00–9:30** *Writing High-Performance Server Applications in Haskell, Case Study: A Haskell Web Server*, Simon Marlow (Microsoft Research)
**9:30–10:00** *Haskell Server Pages: Functional Programming and the Battle for the Middle Tier*, Erik Meijer, Danny van Velzen (Universiteit Utrecht)

**10:00–10:30 Break**

**10:30–12:30 Session II**
**Chair:** Andy Gill
**10:30–11:00** *An Overview of Edison*, Chris Okasaki (Columbia University)
**11:00–11:30** *Combinator Parsers: From Toys to Tools*, Doaitse Swierstra (Universiteit Utrecht)
**11:30–12:00** *Typed Logical Variables in Haskell*, Koen Claessen, Peter Ljunglof (Chalmers University of Technology)
**12:00–12:30** 10-minute slots

**12:30–14:00 Lunch**

**14:00–15:30 Session III**
**Chair:** Chris Okasaki
**14:00–14:30** *Debugging Haskell by Observing Intermediate Data Structures*, Andy Gill (Oregon Graduate Institute)
**14:30–15:00** *A Space-Semantics for Core Haskell*, Adam Bakewell, Colin Runciman (University of York)
**15:00–15:30** 10-minute slots

**15:30–16:00 Break**

**16:00–18:00 Session IV**
**Chair:** Erik Meijer
**16:00–16:30** *Derivable Type Classes*, Ralf Hinze (Universität Bonn), Simon Peyton Jones (Microsoft Research)
**16:30–17:00** *Data Field Haskell*, Jonas Hormerin, Bjorn Lisper (KTH, Stockholm)
**17:00–17:30** *Pattern Guards and Transformational Patterns*, Martin Erwig (Oregon State University), Simon Peyton Jones (Microsoft Research)
**17:30–18:00** Discussion: The Future of Haskell (Ralf Hinze)

**Haskell Workshop Committee**

**Chair:** Graham Hutton, *University of Nottingham*
**Program Committee:**
Richard Bird, *Oxford University*
Andy Gill, *Oregon Graduate Institute*
Ralf Hinze, *Universität Bonn*
Paul Hudak, *Yale University*
Erik Meijer, *Universiteit Utrecht*
Chris Okasaki, *Columbia University*
Tim Sheard, *Oregon Graduate Institute*

**HLCL Program**
**Wednesday September 20**

**12:30–14:00 Lunch**

**14:20–14:30 Opening**

**14:30–15:20 Invited Speaker:** *An Overview of Functional Nets*, **Martin Odersky (EPFL Lausanne)**

**15:20–16:00** *Asynchronous Exceptions in Haskell*, Simon Marlow, Simon Peyton-Jones (Microsoft Research), Andrew Moran (Oregon Graduate Institute)

**16:00–16:30 Break**

**16:30–17:20 Invited Speaker:** *A Distributed Programming Language for Building Security Infrastructures*, **Trevor Jim (AT&T Labs)**

**17:20–18:00** *A Distributed Calculus with Local Areas of Communication*, Tom Chothia, Ian Stark (University of Edinburgh)

**18:00–18:10 Closing**

**HLCL Workshop Committee**

**Co-Chairs:**
John Reppy, *Bell Labs*
Peter Sewell, *University of Cambridge*
**Program Committee:**
Cedric Fournet, *Microsoft Research*
Alan Jeffrey, *DePaul University*
Trevor Jim, *AT&T Labs*
Naoki Kobayashi, *University of Tokyo*
Uwe Nestmann, *Aalborg University*
Aleta Riccardi, *Bell Labs*
Gert Smolka, *Universität des Saarlandes*

**9:45–10:45 Invited Speaker: *A Second Glance at Feferman-Landin Logic*, Ian Mason (University of New England)**

**10:45–11:15 Break**

**11:15–12:45 Session I**
**11:15–11:45** *Syntactic Type Soundness for the Region Calculus*, Simon Helsen, Peter Thiemann (Universität Freiburg)
**11:45–12:15** *A New Criterion for Safe Program Transformations*, Yasuhiko Minamide (University of Tsukuba and Japan Science & Technology Corporation)
**12:15–12:45** *Efficient Substitution in Hoare Logic Expressions*, Andrew Appel, Kedar Swadi, Roberto Virga (Princeton University)

**12:45–14:30 Lunch**

**14:30–15:30 Invited Speaker: *Weak Bisimulations by Decreasing Diagrams*, Cédric Fournet (Microsoft Research)**

**15:30–16:00 Break**

**16:00–17:00 Session II**
**16:00–16:30** *First-Order Semantics for Higher-Order Processes*, Michael Baldamus (University of Karlsruhe)
**16:30–17:00** *Linear Lambda Calculus with Recursion*, Gavin Bierman (Warwick University), Andrew Pitts, Claudio Russo (Cambridge University)

**HOOTS Workshop Committee**

**Chair:** Alan Jeffrey, *DePaul University*
**Program Committee:**
Andrew Gordon, *Microsoft Research*
Robert Harper, *Carnegie Mellon University*
Andrew Pitts, *Cambridge University*
Julian Rathke, *Sussex University*
David Sands, *Chalmers University*
Davide Sangiorgi, *INRIA Sophia Antipolis*
Carolyn Talcott, *Stanford University*

**RULE Program
Tuesday September 19**

**10:00–10:10 Opening**

**10:10–11:00 Session I**
**10:10–10:35** *From Syntactic Theories to Interpreters: A specification language and its compilation*, Yong Xiao, Zena Ariola (University of Oregon),

Michel Mauny (INRIA-Rocquencourt and New York University)
**10:35–11:00** *An Approach to the Integration of Overlapping Rules in Standard ML*, Riccardo Pucella (Cornell University)

**11:00–11:30 Break**

**11:30–12:45 Session II**
**11:30–11:55** *Static Analysis Technique for Equational Logic Programs*, Rakesh Verma (University of Houston)
**11:55–12:20** *Rewriting with Layout*, Mark van den Brand, Jurgen Vinju (CWI)
**12:20–12:45** *On Rule Based Approach to Construction of Logical Transformers*, Jaroslaw Kachniarz (Soft Computer Consultants), Andrzej Szaas (Warsaw University)

**12:45–14:00 Lunch**

**14:00–15:15 Session III**
**14:00–14:25** *A Lambda-Calculus with Letrec, Case, Constructors and Non-Determinism*, Manfred Schmidt-Schauss, Michael Huber (Goethe Universität)
**14:25–14:50** *The Light Lexicographic Path Ordering*, Adam Cichon, Jean-Yves Marion (LORIA & INRIA Nancy)
**14:50–15:15** *Axioms for Rewriting Theory*, Marc Aiguier, Diane Bahrami, Catherine Dubois (Université d'Evry)

**15:15–15:45 Break**

**15:45–17:00 Session IV**
**15:45–16:10** *Toward Rule-Based Visual Programming of Generic Visual Systems*, Mark Minas (Universität Erlangen-Nürnberg), Berthold Hoffmann (Universität Bremen)
**16:10–16:35** *Partial-Order Relational Programming*, Juan Carlos Nieves, Mauricio Osorio (Universidad de las Americas), Fernando Zacarias, Eleazar Oropeza (Benemerita Universitad Autonoma de Puebla)
**16:35–17:00** *The Concurrent Language Aldwych*, Matthew Huntbach (Queens Mary and Westfield College)

**17:00–18:00 General Discussion**

**18:00–19:00 Demos**
ASF+SDF, ELAN etc.

**RULE Workshop Committee**

**Co-chairs:**
Nachum Dershowitz, *Tel-Aviv University*
Claude Kirchner, *LORIA & INRIA Nancy*

> **Scheme Program**
> **Sunday September 17**

**9:00–10:10 Session I**
**Chair:** Daniel P. Friedman
**9:00–9:35** *GOld: a link-time optimizer for Scheme*, Dominique Boucher (Locus Dialogue, Inc.)
**9:35–10:10** *SILK: a playful blend of Scheme and Java*, Kenneth R. Anderson (BBN Technologies), Timothy J. Hickey (Brandeis University), Peter Norvig (NASA Ames Research Center)

**10:15–10:45 Break**

**10:45–11:45 Session II**
**Chair:** Marc Feeley
**10:45–11:05** *Implementing Metcast*, Oleg Kiselyov (Naval Postgraduate School, Monterey)
**11:05–11:25** *Numerical Partial Differential Equations*, Bradley J. Lucier, (Purdue University)
**11:25–11:45** *SGDL/Scheme: A High-Level Algorithmic Scheme Implementation for Projective Solid Modeling Programming*, Jean-Francois Rotge (Université de Montréal)

**12:00–13:30 Lunch**

**13:30–15:15 Session III**
**Chair:** Kent Dybvig
**13:30–14:05** *BIT: A Very Compact Scheme System for Embedded Applications*, Danny Dubé (Université de Montréal)
**14:05–14:40** *Automatic Generation of Compact Programs*, Mario Latendresse (Rice University)
**14:40–15:15** *Writing Macros in CPS*, Erik Hilsdale, Daniel P. Friedman (Indiana University)

**15:15–15:45 Break**

**15:45–16:45 Session IV**
**Chair:** Manuel Serrano
**15:45–16:05** *An Implementation of Transparent Migration on Standard Scheme*, Eijiro Sumii (University of Tokyo)
**16:05–16:25** *Implementing Continuations with Threads*, Marc Feeley (Université de Montréal)
**16:25–16:45** *Component Support for PLT Scheme*, Paul A. Steckler (Rice University)

**16:50–18:00 Session V**
**Chair:** Matthias Felleisen
Open Discussion: SRFI process, pre-SRFI presentations, the IEEE standard, etc.

> **Scheme Workshop Committee**

> **SAIG Program**
> **Wednesday September 20**

**8:30–9:15 Invited Speaker:** *Implementing Closed Domain-Specific Languages*, **Richard Kieburtz (Oregon Graduate Institute)**
**9:15–9:40** *Compiling Embedded Languages*, Conal Elliott, Sigbjørn Finne (Microsoft Research), Oege de Moor (Oxford University)
**9:40–10:05** *Lightweight and Generative Components II: Binary-Level Components*, Samuel Kamin, Miranda Callahan, Lars Clausen (University of Illinois at Urbana-Champaign)

**10:05–10:25 Break**

**10:25–11:10 Invited Speaker:** *Refinements and Automatic Development of Software*, **Don Batory (University of Texas at Austin)**
**11:10–11:35** *Fragmental Specialization*, Simon Helsen, Peter Thiemann (Universität Freiburg)
**11:35–12:00** *A New Termination Condition for Specialization*, Litong Song, Yoshihiko Futamura (Waseda University)

**12:00-13:20 Lunch**

**13:20–14:05 Invited Speaker:** *Reasoning About Staged Computation*, **Frank Pfenning (Carnegie Mellon University)**
**14:05–14:30** *Multi-Stage Imperative Languages: A Conservative Extension Result*, Cristiano Calcagno, Eugenio Moggi (Università di Genova)
**14:30–14:55** *Specification and Correctness of Lambda Lifting*, Adam Fischbach, John Hannan (Penn State University)

**15:05–15:50 Invited Speaker:** *Specialization of System Programs: Lessons and Perspectives*, **Gilles Muller (IRISA)**
**15:50–16:15** *On Jones-Optimal Specialization for*

*Strongly Typed Languages*, Henning Makholm (University of Copenhagen)

**16:15–16:25 Break**

**16:25–17:25 Panel presentations**
*Pragmatic Aspects of Reusable Program Generators*, Norman Ramsey (Harvard University)
*Type-Based Useless-Code Elimination for Functional Programs*, Stefano Berardi, Mario Coppo, Ferruccio Damiani (Università di Torono), Paola Giannini (Università di Torono and Università del Piemonte Orientale)
*Code Generators for Automatic Tuning of Numerical Kernels: Experiences with FFTW*, Rich Vuduc, Jim Demmel (University of California, Berkeley)
*Generating Data Analysis Programs from Statistical Models*, Bernd Fischer, Johann Schumann, Thomas Pressburger (NASA Ames Research Center)

**17:25–18:00 Panel Discussion**

> **SAIG Workshop Committee**

**Chair:** Walid Taha, *Chalmers University of Technology*
**Program Committee:**
Cliff Click, *Sun Microsystems*
Rowan Davies, *Carnegie Mellon University*
Julia Lawall, *DIKU*
Torben Mogensen, *DIKU*
Suresh Jagannathan, *NEC Research*
Tim Sheard, *Oregon Graduate Institute*

> **TIC Program**
> **Thursday September 21**

**9:00–10:30 Session I**
**Chair:** Trevor Jim
**9:00–9:30** *Scalable Certification for Typed Assembly Language*, Dan Grossman, Greg Morrisett (Cornell University)
**9:30–10:00** *Space Issues in Compiling with Intersection and Union Types*, Allyn Dimock (Harvard University), Ian Westmacott (Boston University), Robert Muller (Boston College), Franklyn Turbak (Wellesley College), Joe Wells (Heriot-Watt University), Jeffrey Considine (Boston University)
**10:00–10:30** *Sound and Complete Elimination of Singleton Kinds*, Karl Crary (Carnegie Mellon University)

**10:30–11:00 Break**

**11:00–12:30 Session II**
**Chair:** Franklyn Turbak
**11:00–11:30** *A Type System for JVM Threads*,

Gaetano Bigliardi, Cosimo Laneve (University of Bologna)
**11:30–12:00** *Garbage Collection Based on Linear Type Systems*, Atsushi Igarashi, Naoki Kobayashi (University of Tokyo)
**12:00–12:30** *Optimizing Message Sends in Object-Oriented Languages Through Type-Invariant Region Analysis*, Mark Leair (The Portland Group), Santosh Pande (University of Cincinnati)

**12:30–14:00 Lunch**

**14:00–15:30 Session III**
**Chair:** Andrew Kennedy
**14:00–14:30** *Towards an Abstract Model of Java Dynamic Linking and Verification*, Sophia Drossopoulou (Imperial College)
**14:30–15:00** *Safe and Flexible Dynamic Linking of Native Code*, Michael Hicks (University of Pennsylvania), Stephanie Weirich (Cornell University), Karl Crary (Carnegie Mellon University)
**15:00–15:30** *Sharing in Typed Module Assembly Language*, Dominic Duggan (Stevens Institute of Technology)

**15:30–16:00 Break**

**16:00–17:30 Session IV**
**Chair:** Dominic Duggan
**16:00–16:30** *Alias Types for Recursive Data Structures*, David Walker, Greg Morrisett (Cornell University)
**16:30–17:00** *Simple Usage Polymorphism*, Keith Wansbrough (Cambridge University), Simon Peyton Jones (Microsoft Research)
**17:00–17:30** *Fully Reflexive Intensional Type Analysis in Type Erasure Semantics*, Bratin Saha, Valery Trifonov, Zhong Shao (Yale University)

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