

EDITORIAL BOARD

EDITOR

Mary S. Van Deusen
IBM Watson Research
30 Saw Mill River Road
Hawthorne, NY 10532
(914) 784-7845
(914) 232-7490
(508) 384-2526
(914) 784-7279 (fax)
maida@watson.ibm.com

ASSOCIATE EDITOR

Judith A. Chien, Intern, Near East
The University Museum
33rd and Spruce Streets
Philadelphia, PA 19104
(215) 898-4088

TECHNICAL ARTICLES

JonL White
Lucid, Inc.
707 Laurel Street
Menlo Park, CA 94025
(415) 329-8400 X5514
edsel!jonl@labrea.stanford.edu

(*STANDARD-OUTPUT*)

Guy Steele
Thinking Machines Corp.
245 First Street
Cambridge, MA 02142
(617) 876-1111
gls@think.com

(*QUERY-IO*)

Barry Margolin
Thinking Machines Corp.
245 First Street
Cambridge, MA 02142
(617) 876-1111
barmar@think.com

(ALGORITHMS)

Richard C. Waters
MIT AI Laboratory
545 Technology Sq.
Cambridge, MA 02139
(617) 253-6037
Dick@ai.mit.edu

THE SCHEME OF THINGS

Pavel Curtis
Xerox PARC
3333 Coyote Hill Rd.
Palo Alto, CA 94304
(415) 494-4455
Pavel.pa@Xerox.Com

READINGS IN SCHEME

Ozan S. Yigit
York University
Dept. of Computing Services
4700 Keele Street, North York
Ontario, M3J 1P3
CANADA
(416) 736-5257 X3976
oz@nexus.yorku.ca

Dear Colleague,

There's a change in our departments. John Foderaro will be dropping the Programming Environments column. Our thanks to John for his support and help since Lisp Pointer's early days. We're beginning to get a little light on departments. Besides articles and department contributions, any volunteers out there for new departments. Think about what you'd like to know, and then why not volunteer to collect it? Well, actually, I can imagine why not. I'd just like to encourage you to imagine why you might WANT to join us.

One thing I would like to know is what do you use Lisp for out there. Anyone using it for multimedia tool support? How about some letters briefly describing your current set of applications?

In this issue, you'll find a program for the 1992 Lisp and Functional Programming Conference chaired by JonL White. And last issue you were sent the proceedings of that conference. A loud round of thanks to SIGPLAN! You'll also find a Call for Papers for the 1993 Principles of Programming Languages in Charleston. I'm cochairing it with Bernard Lang, and Susan Graham is program chair. I hope that we'll be able to continue representation at this seminal conference from the Lisp and Scheme communities. We're adding a tutorial this year, which may make the topics more accessible to a wider audience.

The September 1991 issue of Communications of the ACM was a special issue on Lisp, guest edited by John Foderaro. Anyone interested in obtaining single copies of the issue (\$8 for ACM members and \$17 for non-members) can use the information below to order.

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Sincerely,



Mary S. Van Deusen

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Cover illustration by Cary Henrie.

# 1992 ACM Conference on ( ... ) Lisp and Functional Programming

Sponsored jointly by ACM SIGPLAN, SIGACT, and SIGART

Fairmont Hotel  
San Francisco, California  
June 22-24, 1992

**General Chair:**

Jon L White  
Lucid, Inc.  
707 Laurel Street  
Menlo Park, CA 94025  
(415) 329-8400 x5514  
jonl@lucid.com

**Registration Chair:**

Dick Waters  
Mitsubishi Electric  
Research Laboratories, Inc  
Cambridge, MA 02139  
(617) 621-7508  
dick@merl.com

**Program Chair:**

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*Watch SIGPLAN Notices for program and registration details*

**Advance Program for L&FP '92**  
1992 ACM Conference on Lisp and Functional Program

**Session 1: 8:30–10:00, Monday**

*Improving Binding Times Without Explicit CPS-Conversion*

Anders Bondorf

*Safe Fusion of Functional Expressions*

Wei-Ngan Chin

*Compiling Lazy Pattern Matching*

Luc Maranget

**Session 2: 10:30–12:00, Monday**

*Caching Considerations for Generational Garbage Collection*

Paul R. Wilson, Michael S. Lam, and Thomas G. Moher

*Improving the Performance of SML Garbage Collection using Application-Specific Virtual Memory Management*

Eric Cooper, Scott Nettles, Indira Subramanian

*Polymorphic Type Reconstruction for Garbage Collection without Tags*

Benjamin Goldberg and Michael Gloger

**Session 3: 1:30–3:00, Monday**

*Projective ML*

Didier Rémy

*Parsers and Printers in ML*

Michel Mauny and Daniel de Rauglaudre

*Interactive Modular Programming in Scheme*

Sho-Huan Simon Tung

**Session 4: 3:30–5:30, Monday**

*Finiteness Conditions for Fixed Point Iteration*

Flemming Nielson and Hanne Riis Nielson

*A Syntactic Approach to Fixed Point Computation on Finite Domains*

Tyng-Ruey Chuang and Benjamin Goldberg

*Abstract Interpretation in Weak Powerdomains*

Robert Muller and Yuli Zhou

*A Precise Relationship Between the Deductive Power of Forward and Backward Strictness Analysis*

Marc Neuberger

**Session 5: 8:30–10:00, Tuesday**

*Proving Memory Management Invariants for a Language Based on Linear Logic*

Jawahar Chirimar, Carl A. Gunter, and Jon G. Riecke

*Proving the Correctness of Storage Representations*

Mitchell Wand and Dino P. Oliva

*On Extending Computational Adequacy by Data Abstraction*

Val Breazu-Tannen and Ramesh Subrahmanyam

**Session 6: 10:30–12:00, Tuesday**

*Parametric Type Classes*

Kung Chen, Paul Hudak, and Martin Odersky

*A Calculus for Overloaded Functions with Subtyping*

Giuseppe Castagna, Giorgio Ghelli, and Giuseppe Longo

*Type Inference in the Presence of Overloading, Subtyping, and Recursive Types*

Stefan Kaes

**Session 7: 1:30–3:00, Tuesday**

*Global Tagging Optimization by Type Inference*

Fritz Henglein

*Analysis of Structured Types in Lisp-like Languages*

Edward Wang and Paul N. Hilfinger

*Taming the Y Operator*

Guillermo Juan Rozas

**Session 8: 3:30–5:30, Tuesday**

*The Python Compiler for CMU Common Lisp*

Robert A. MacLachlan

*Integrating the Scheme and C Languages*

Hans Muller and John R. Rose

*WCL: Delivering Efficient Common Lisp Applications Under Unix*

Wade Hennessey

*Tachyon Common Lisp: An Efficient and Portable Implementation of CLtL2*

Atsushi Nagasaka, Yoshihiro Shintani, Tanji Ito, Hiroshi Gomi, and Junichi Takahashi

**Session 9: 8:30–10:30, Wednesday**

*A Confluent Calculus of Macro Expansion and Evaluation*

Ana Bove and Laura Arbillia

*Reasoning About Continuation-Passing Style Programs*

Amr Sabry and Matthias Felleisen

*Back to Direct Style II: First-Class Continuations*

Olivier Danvy and Julia Lawall

**Session 10: 11:00–12:30, Wednesday**

*Dynamic Program Parallelization*

Lorenz Huelsbergen and James R. Larus

*Global Analysis for Partitioning Non-Strict Programs into Sequential Threads*

Kenneth R. Traub, David E. Culler, and Klaus E. Schauser

*Fast Parallel Implementation of Lazy Languages — The EQUALS Experience*

Owen Kaser, Shaunak Pawagi, C. R. Ramakrishnan, I. V. Ramakrishnan, and R. C. Sekar

*A Foundation for an Efficient Multi-Threaded Scheme System*

Suresh Jagannathan and Jim Philbin

# CALL FOR PAPERS

## 1992 Lisp Users and Vendors Conference

The Second International Lisp User and Vendor Conference (LUV '92) will be held on August 10-14, 1992, at the U.S. Grant Hotel in San Diego, CA, and will be centered around the theme of "Delivering Business Success with Lisp". The conference is sponsored in part by the Association of Lisp Users.

The conference schedule includes two days of tutorials; a day of panel sessions, keynote addresses, technical paper presentations, and a student paper and application competition; a day of vendor presentations and demonstrations of new products; and more.

Papers submitted to the conference should focus on experience with practical applications of Lisp. The material must clearly demonstrate a practical value from the use of the Lisp language or Lisp technology; as such, papers need not be especially innovative nor original, but preference will be given to previously undissemminated reports and experiences. Topics in the area of programming languages and environments are welcome; but untested or purely theoretical ideas without a clear direction towards the theme of the conference would be less suitable.

Authors should submit 7 copies of their papers to the program chair at the address below. The length of the written papers should not exceed 10 pages (with font size at least 10-point or larger.) Accepted papers will appear in the written proceedings, which will be distributed at the conference. The authors of certain selected papers will be invited to make a 20-minute verbal presentation at the technical talks sessions during the conference. Time constraints will likely prevent the presentation of all accepted papers.

Submissions must be received by June 1, 1991. They should include a return postal address and a telephone number; an electronic mail address should also be included, if available. Authors will be notified of the acceptance or rejection of their papers by July 6, 1992. Corrections and alterations to the papers, if any, may be done up until July 24, 1992, which is the final date for receipt of a camera-ready copy.

Authors of accepted papers will be required to sign a release for publication in the conference proceedings. Authors may retain the copyright themselves if they wish by installing their own copyright notice in the paper. Previously copyrighted material may still be acceptable depending on the permission to publish; in this case, the previous copyright and notice of permission should appear in the paper.

Persons interested in the student competition should contact the student coordinator for submission requirements and further details. Both technical papers and descriptions of Lisp applications are valid entries. Submission and acceptance dates, as well as acceptable themes, are the same as for other authors.

### Program Chair:

Jon L. White  
Lucid, Inc.  
707 Laurel Street  
Menlo Park, CA 94025  
tel: 415-329-8400, x5514  
fax: 415-329-8480  
email: jonl@lucid.com

### Program Committee:

Richard Billington, Georgia Institute of Technology  
Kathy Egan, McDonnell-Douglas Space Systems Company  
Masayuki Ida, Aoyama Gaukin University (Tokyo)  
Barry Margolin, Thinking Machines Corp.  
Chris Richardson, Franz, Inc.  
Bill York, International Lisp Associates

### Conference General Chair:

Jim Aragones  
GE-CRD, K1-5c30  
1 River Rd PO Box 8  
Schenectady NY 12301  
tel: 518-387-6967  
fax: 703-742-7200  
email: jka@vega.crd.go.com

### Student Coordinator:

Thomas Pole  
Software Productivity Consortium  
Reuse and Measurement Division  
2214 Rock Hill rd. Herndon, VA 22070  
tel: 703-742-7131  
email: pole@software.org