



CALL FOR PARTICIPATION AND ADVANCE PROGRAM

2002 International Symposium on Memory Management
(ISMM)

Sponsored by ACM SIGPLAN

Berlin, Germany, June 20–21, 2002

(in conjunction with PLDI 2002)

http://www.hpl.hp.com/personal/Hans_Boehm/ismm/



Since 1992, **ISMM** (and its predecessor, **IWMM**) has been a forum for research in management of dynamically allocated memory. Areas of interest include but are not limited to: explicit storage allocation and deallocation; garbage collection algorithms and implementations; compiler analyses to aid memory management; interactions with languages, operating systems, and hardware, especially the memory system; and empirical studies of allocation and referencing behavior in programs that make significant use of dynamic memory.

Registration Please register online via the **ISMM** 2002 web-site (at the URL given above). Registration includes lunches and refreshments. Information on accommodation arrangements, and the conference location at the Crowne Plaza Berlin City Centre, is available via the PLDI 2002 web site (http://sunshine.cs.uni-dortmund.de/knoop/PLDI2002/pldi2002_main.html).

Thursday 20th June

8:15-9:00 Registration

9:00-9:15 Introduction

9:15-10:15 Invited Talk: *The Business Importance of Java Garbage Collection*, Robert F. Berry

10:15-10:45 Break

10:45-12:15 Session I: *Real-time*

Session chair: David Bacon

10:45-11:15 *Applying Priorities to Memory Allocation*, Sven Robertz

11:15-11:45 *Reducing Pause Time of Conservative Collectors*, Toshio Endo, Kenjiro Taura, and Akinori Yonezawa

11:45-12:15 *Automated Discovery of Scoped Memory Regions for Real-Time Java*, Morgan Deters and Ron Cytron

12:15-14:00 Lunch

14:00-15:30 Session II: *Empirical Studies of Applications*

Session chair: Kathryn McKinley

14:00-14:30 *Understanding the connectivity of heap objects*, Martin Hirzel, Johannes Henkel, Amer Diwan, and Michael Hind

14:30-15:00 *Visualising The Train Garbage Collector*, Tony Printezis and Alex Garthwaite

15:00-15:30 *Estimating the Impact of Heap Liveness Information on Space Consumption in Java*, Ran Shaham, Elliot Kolodner, and Mooly Sagiv

15:30-16:00 Break

16:00-17:00 Open discussion session.

Friday 21st June

9:00-10:00 Session III: *Concurrency, Parallelism, Distribution (1)*

Session chair: David Tarditi

9:00-9:30 *Thread-Local Heaps for Java*, Tamar Domani, Gal Goldshtein, Elliot Kolodner, Ethan Lewis, Erez Petrank, and Dafna Sheinwald

9:30-10:00 *Heap Architectures for Concurrent Languages using Message Passing*, Erik Johansson, Konstantinos Sagonas, and Jesper Wilhelmsson

10:00-10:30 Break

10:30-11:30 Session IV: *Concurrency, Parallelism, Distribution (2)*

Session chair: Tony Printezis

10:30-11:00 *An Algorithm for Parallel Incremental Compaction*, Ori Ben-Yitzhak, Irit Goft, Elliot Kolodner, Kean Kuiper, and Victor Leikehman

11:00-11:30 *Using Passive Object Garbage Collection Algorithms*, Abhay Vardhan and Gul Agha

11:30-13:30 Lunch

13:30-15:00 Session V: *Diverse Topics*

Session chair: Luc Moreau

13:30-14:00 *Adaptive Caching for Demand Prepaging*, Scott Kaplan, Lyle McGeoch, and Megan Cole

14:00-14:30 *An Adaptive, Region-based Allocator for Java*, Feng Qian and Laurie Hendren

14:30-15:00 *Dynamic Memory Management for Programmable Devices*, Sanjeev Kumar and Kai Li

15:00-15:30 Break

15:30-17:10 Session VI: *Implementation Techniques*

Session chair: Rick Hudson

15:30-15:50 *Accurate Garbage Collection in an Uncooperative Environment*, Fergus Henderson

15:50-16:10 *Software Caching Vs. Prefetching*, Aneesh Aggarwal

16:10-16:40 *Mostly Lock-Free Malloc*, Dave Dice and Alex Garthwaite

16:40-17:10 *In or Out? Putting Write Barriers in Their Place*, Stephen M. Blackburn and Kathryn S. McKinley