

# Why **PI**?

PERIMETER INSTITUTE FOR THEORETICAL PHYSICS

## 2002 Nerenberg Lecture by Christopher Essex

### High-Tech Executive Speaks for Research without Business Payoff at Nerenberg 2002



Mike Lazaridis

Mike Lazaridis, founder, President and CEO of Research in Motion Limited (RIM) was the the 2002 Nerenberg Lecturer on March 19th at The University of Western Ontario.

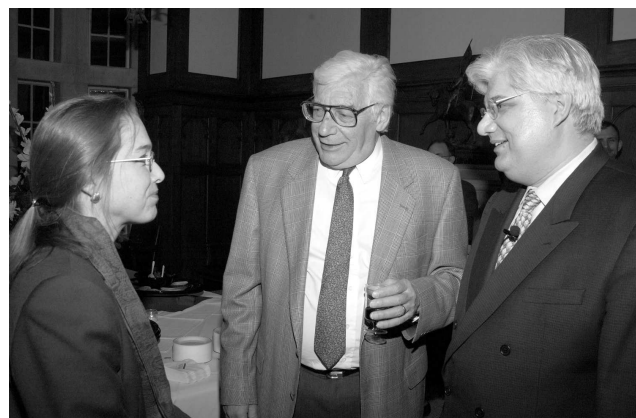
PI, which is also the mascot of the Pacific Institute for Mathematical Sciences, refers here to the new Perimeter Institute for Theoretical Physics, which Lazaridis founded with his own funds amounting to \$100 million. The Perimeter Institute is dedicated to advanced research in gravitation, string theory, quantum information theory, and elementary particle physics.

There are many monetary and political incentives for universities to turn their backs on pure research. Research priorities have turned strongly toward immediate commercial application. It is a cliché that corporate executives are uncritically sympathetic to this trend. If you believe in the value of research for its own sake, Lazaridis's gesture was the ultimate in putting

your money where your mouth is.

To the usual Nerenberg full house, Mike Lazaridis explained that pure research was the origin of applications of the (possibly) distant future. Laying groundwork today will allow future generations to be in a position to reap the benefits. The ultimate value of such pure research cannot be judged in contemporary terms. Things that appear as having no immediate value economically may appear very different in decades to come.

In addition to many business-oriented honors, Mike Lazaridis has received both an Academy Award and an Emmy for his technical innovations. His company, RIM, is a leading designer, manufacturer and



Sue Ann Campbell, Paul Sullivan and Mike Lazaridis

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## Society News

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marketer of innovative wireless solutions for the mobile communications market. Their portfolio of award-winning products includes the RIM Wireless Handheld™ product line, the BlackBerry™ wireless email solution, embedded radio-modems and software development tools.

Organized by Western's Department of Applied Mathematics, the Nerenberg Lecture is named after the late professor Paddy Nerenberg and is intended to honour his appreciation for the democracy of ideas. The annual series is meant to challenge the public with ideas that they may not see in any other forum. Previous speakers have been Sir Roger Penrose (Oxford, mathematics, *Science Mathematics and the Mind*, 1998), Norman Levitt (Rutgers, mathematics, *the Ambiguous Situation of Science in Contemporary Society*, 1999), Mark Tilden (Los Alamos, robotics, *If This Is The Future, Where's My Robot?*, 2000), S. Fred Singer (SEPP, *Where was Global Warming this Winter When We Needed It?*, 2001). Each lecturer has in one way or another stretched the audience with a presentation tinged with the excitement of something possibly controversial, but extraordinary and unexpected.



UWO Dean of Science Fred Longstaffe, Chris Essex and Mike Lazaridis

## 2001 Doctoral Dissertation Award

by John Stockie



The winner of the CAIMS•SCMAI Doctoral Dissertation Award for the year 2001 was **Dr. David Iron** for his thesis entitled *The Stability and Dynamics of Spike-Type Solutions to the Gierer-Meinhardt Model*. The thesis involved a careful asymptotic analysis of a reaction-diffusion system in which spike-type solution profiles appear. The analysis was complemented by numerical simulations and conclusions were drawn regarding the behaviour of biological processes such as cellular differentiation and morphogenesis. The winning thesis was an excellent example of how analysis and computation can be combined to better understand complex processes arising in real-world applications.

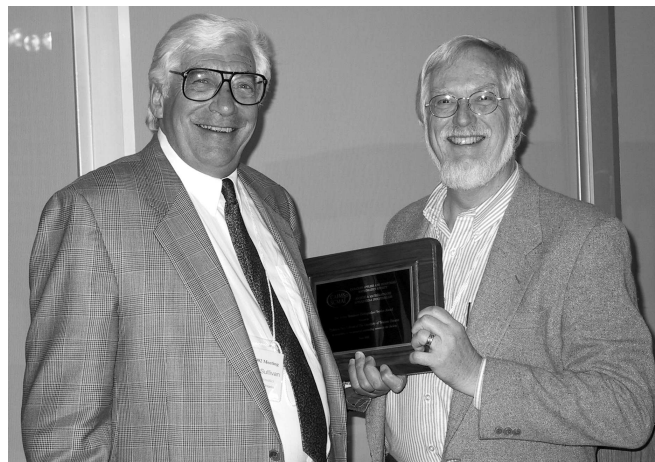
**Dr. Iron** obtained his Ph.D. from the Institute of Applied Mathematics at the University of British Columbia under the supervision of **Professor Michael Ward**. He is currently working as a postdoctoral fellow at the Korteweg-de Vries Institute for Mathematics in Amsterdam.

## 2002 Arthur Beaumont Distinguished Service Award

by Bill Langford

**Professor Paul Sullivan** of the University of Western Ontario received the Arthur Beaumont Distinguished Service Award at the 2002 Annual Conference in Calgary. Professor Sullivan was cited for his sustained and outstanding service to the Society over many years.

A commemorative plaque was presented to Paul at the Conference Banquet by **Bill Langford**, on behalf of the Arthur Beaumont Award Committee. The Award recognizes those members of CAIMS•SCMAI who have, through their efforts on behalf of the Society, exhibited the traits of unselfish service which Arthur Beaumont himself embodied.



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 Society News
 

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## CAIMS • SCMAI 2003 Election - Call for Nominations

CAIMS • SCMAI will be holding an election next winter (February or March 2003) for:

- President-Elect
- Treasurer
- Secretary
- Two Members at Large on the Board of Directors.

Nominations should reach the Chair of the Nominations Committee, Ken Jackson (krj@cs.toronto.edu), by 31 December 2002.

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## CAIMS • SCMAI Research Prize

### OBJECTIVE

The award has been established to recognize innovative and exceptional research contributions in an emerging area of applied or industrial mathematics.

### THE AWARD

The award will consist of a prize of \$1,000 and a commemorative plaque that will be presented at the CAIMS • SCMAI Annual Meeting. The recipient will be invited to give a plenary lecture at the Annual Meeting in the year of the award. A travel allowance of \$500 will be provided.

### NOMINATION

Nominations should reach:

Anthony Peirce  
#121–1984 Mathematics Road  
Vancouver, BC, V6T 1Z2

peirce@math.ubc.ca

no later than **January 31, 2003** and should include four copies of each of: a title for the nomination designating research contributions in a specific area; a summary of the contributions in the form of a five-line press release; a detailed description (no longer than two pages) of the research contributions of the nominee in the specified area; a CV including the list of publications; and four reprints.

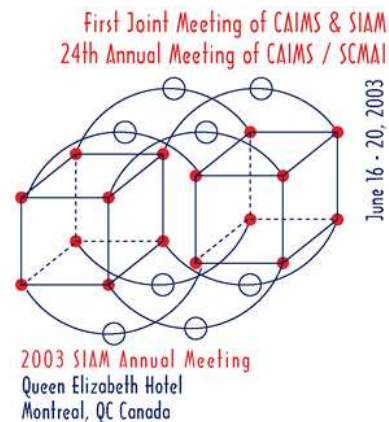
### ADJUDICATION

The nominations will be evaluated by a panel of judges appointed by the President of the Society; their decisions will be final. The judges will select the winner using criteria based on excellent research contributions to an emerging area of applied mathematics. The panel of judges may seek advice from other experts.

# First Joint Meeting of CAIMS • SCMAI and SIAM



24th Annual Meeting of CAIMS • SCMAI  
2003 SIAM Annual Meeting  
June 16–20



## MONTREAL

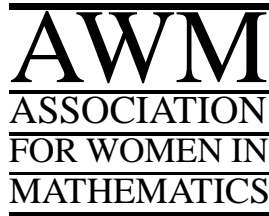
- Organizing Committee**
- Canadian Chair: Jacques Bélair, Université de Montréal
  - U.S. Chair: Ilse Ipsen, North Carolina State University
  - Members: Anne Bourlioux, Université de Montréal
  - Russell Caflisch, UCLA
  - Carlos Castillo-Chavez, Cornell University
  - Carolyn Cho, Physiome Sciences
  - Claude Crépeau, McGill University
  - Martin Golubitsky, University of Houston
  - Norden E. Huang, NASA Goddard Space Center
  - William Newman, UCLA
  - George Papanicolaou, Stanford University
  - Robert Russell, Simon Fraser University
  - Sam Shen, University of Alberta

**Conference Themes include**

Fluid Dynamics, Environment, Mathematical Biology, Nanosciences, Quantum Computing, Numerical Methods

**Web site:** [www.siam.org/meetings/an03/](http://www.siam.org/meetings/an03/)





## Workshop at the Joint CAIMS • SCMAI–SIAM 2003 Meeting

### **Format:**

The workshop will consist of a poster session by graduate students and two to three minisymposia featuring selected postdocs, plus an informational minisymposium directed at starting a career. The graduate student poster sessions will include all areas of research but each postdoc minisymposium will have a definite focus, and will be selected from the research areas of Mathematical Biology, Modeling, Control, Optimization, Scientific Computing, and PDEs and Applications. All mathematicians (female and male) are invited to attend the entire program.

### **Volunteers Needed:**

AWM is seeking volunteers to lead discussion groups and to act as mentors for workshop participants. If you are interested in volunteering, please contact the AWM office. Call 301-405-7892 or email [awm@math.umd.edu](mailto:awm@math.umd.edu).

### **Travel Support:**

AWM will offer support for travel and two days subsistence for up to 20 participants who are U.S. citizens or residents. For information on applying, please see the AWM web site <http://www.awm-math.org/workshops.html#summer2003>.

Contingent on funding, CAIMS•SCMAI will offer support for travel and two days subsistence for four women postdocs who are Canadian citizens or residents. Applications should include:

1. a cover letter,
2. a title and abstract (75 words or less) of the talk to be given (if accepted),
3. a summary of their work (one-two pages),
4. a curriculum vitae, and
5. [Recommended, not required] a supporting letter of recommendation from a faculty member or research mathematician who knows their research. Additional letters of support are encouraged.

The word “postdoc” refers to any mathematician who has received her Ph.D. within approximately the last five years; whether or not she currently holds a postdoctoral or other academic or non-academic position.

Please send three completed copies of the application materials (including the cover letter) to:

Sue Ann Campbell, Secretary, CAIMS•SCMAI  
Department of Applied Mathematics  
University of Waterloo  
Waterloo ON, N2L 3G1

Applications should be received by **January 31, 2003**.