# CECM Summer Meeting 2005

Computational Mathematics

Wednesday · August 3, 2005 · IRMACS · SFU Burnaby

CECM, Maplesoft, PIMS, IRMACS and MITACS are pleased to present *CECM 2005 Computational Mathematics*, a summer conference hosted by CECM at Simon Fraser University.

Registration

Registration is required. A registration fee of $50 per participant will be charged to all participants except invited speakers and invited guests. The registration fee includes the cost of a light lunch. Students may wish to ask their supervisor to pay for their registration fee. Participants who are unable to pay should contact Michael Monagan.
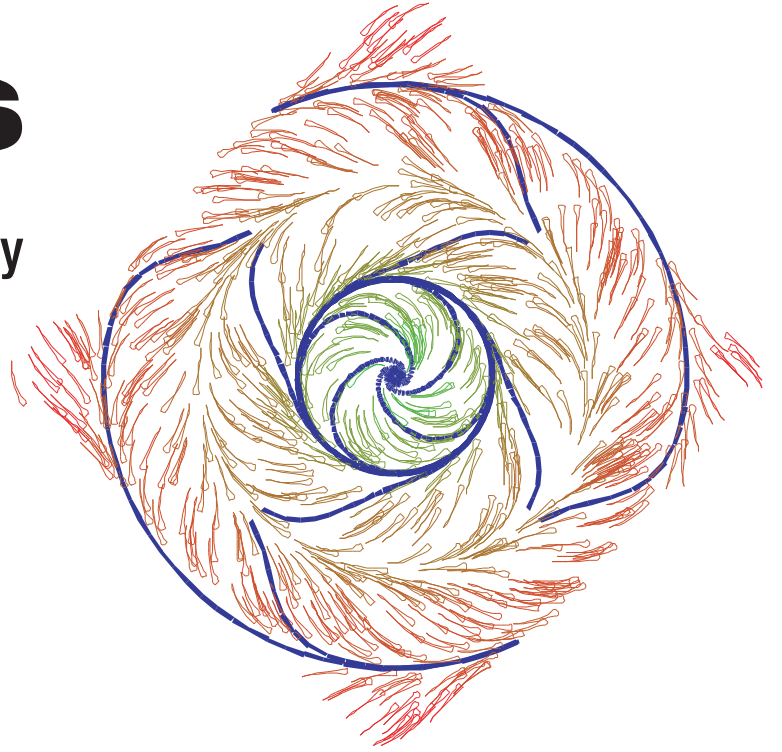
Morning Session

08:00
Poster Setup

08:30-08:50
Registration
(Refreshments will be served.)

08:50-09:00
Opening · Michael Monagan

09:00-09:50
Jason Bell Simon Fraser University
Rational functions, Hilbert series, and forbidden subwords

09:50-10:40
Marni Mishna Simon Fraser University
Taming apparent singularities via Ore Closure

10:40-11:00
Coffee Break

11:00-11:50
Kevin Hare University of Waterloo
The Monic Integer Chebyshev Problem

11:50-12:30
Allan Wittkopf Simon Fraser University
Maple 10: New GUI features and math capabililites

Afternoon Session

12:30-14:00
Lunch at the Himalayan Peak

14:00-14:50
Walter Gander Institute for Computational Science · ETH Zürich
Generating Numerical Algorithms Using Computer Algebra

14:50-16:30
Poster and demo session
(Refreshments will be served at 15:30.)

16:30-17:20
Richard Crandall Center for Advanced Computation · Reed College
Theory and application of space-filling curves

17:20
Best poster awards

18:00
Social event

Poster and Demo Session

Mohammad Ali Ebrahimi and Michael Monagan Drawing graphs by numerical solution of a system of second order ordinary differential equations (P & D)

Mohammad Ali Ebrahimi and Michael Monagan Visualizing system of differential equations in Maple (P & D)

Al Erickson, Michael Monagan and Ha Le Univariate polynomial factorization in Maple via combinatorial trial division (P)

Jeffrey B Farr Multivariate interpolation in Maple (P)

Greg Fee A generalized Apollonius problem (P)

Ron Ferguson Optimization methods for binary sequences — The Merit Factor Problem (P)

Mahdad Khatirinejad A Graph Theory Package for Maple (P & D)

Wen Hao Howard Liu and Ha Le Numerical integration in the student subpackage "*Numercial Analysis*" (P)

Simon Lo Computing characteristic polynomials over Z (P & D)

Enkeleida Lushi An inversion algorithm for multiple-source dispersion and deposition of particulate matter (P)

Enkeleida Lushi Computations of water wave interfaces (P)

Roman Pearce Rational expression simplification with algebraic side relations (P)

Dong Wang Variable Step-size Implicit-Explicit linear Multistep Methods (VSIMEX) for time-dependent PDEs (P)

register at www.cecm.sfu.ca/events

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