FIELDS

THEMATIC PROGRAM ON THE FOUNDATIONS OF COMPUTATIONAL MATHEMATICS

JULY-DECEMBER, 2009

ORGANIZING COMMITTEE

Peter Borwein (Simon Fraser University)
Teresa Krick (University of Buenos Aires)
Richard Schwartz (Brown University)

Stephen A. Cook (University of Toronto)
Adrian Lewis (Cornell University)
Michael Shub (University of Toronto)

The semester will focus on portions of the following web of inter-related disciplines:
- Computational Algebraic Geometry and Symbolic Computation;
- Computational Number Theory;
- Computational Geometry, Topology, and Dynamics;
- Complexity and Computability in Real Computation;
- Optimization Theory

WORKSHOPS

September 22 - 26, 2009
WORKSHOP ON DISCOVERY AND EXPERIMENTATION IN NUMBER THEORY

Organizing Committee: Peter Borwein (Simon Fraser University) - Chair
Michael Filaseta (University of South Carolina), Kevin Hare (University of Waterloo),
Michael Mossinghoff (Davidson College), Chris Smyth (Edinburgh University)

October 20 - 24, 2009
WORKSHOP ON COMPLEXITY OF NUMERICAL COMPUTATION.

Organizing Committee:Teresa Krick (University of Buenos Aires)- Chair
Felipe Cucker (City University of Hong Kong), Askold Khovanskii (University of Toronto)
Adrian Lewis (Cornell University), Michael Shub (University of Toronto)

November 17 - 21, 2009
WORKSHOP ON COMPUTATIONAL DIFFERENTIAL GEOMETRY, TOPOLOGY, AND DYNAMICS.

Organizing Committee: Richard Schwartz (Brown University)-Chair, Alex Nabutovsky (University of Toronto)
Carles Simo (University of Barcelona), Michael Yampolsky (University of Toronto)

GRADUATE COURSES

Graduate courses are planned in some or all of the following areas:
- Solving systems of polynomial equations and inequalities
- Models of Computability and Complexity in Geometry, Topology and Analysis
- Topics in Computational Differential Geometry, Topology and Dynamics
- Explicit, Experimental and Computational Number Theory

For more details about the Thematic Program and to apply for postdoctoral fellowships or participation support please see:

www.fields.utoronto.ca/programs/scientific/09-10/FoCM/

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