Waterloo Workshop on Computer Algebra

April 10 - 12, 2006

Wilfrid Laurier University

http://www.cargo.wlu.ca/wwca/

Day 1. Bricker Academic Building, room 202 (BA 202)

9:30 - 10:00
Dr. A. Szabo, FCIC, Dean, Faculty of Science, WLU
Dr. S. Song, Chair, Department of Physics and Computer Science, WLU
Opening of Waterloo Workshop on Computer Algebra

10:00 - 10:30 **Mark van Hoeij** **Solving linear ODE's in terms of solutions of linear ODEs of lower order**

10:30 - 11:00 **Jacques Carette** **Systems of recurrences, hypergeometric functions and reverse engineering of scientific computation code**

11:00 - 11:30 **Coffee break**

11:30 - 12:00 **Kevin Hare** **Variations on** $1 = 0.999\cdots$

12:00 - 12:30 **Ilias Kotsireas** **Summation via Fourier series and differential equations**

12:30 - 14:00 **LUNCH**

14:00 - 14:30 **Sergei Tsarev** **Factorization of multidimensional linear partial differential equations**

14:30 - 15:00 **Arne Storjohann** **The vector rational function reconstruction problem**

15:00 - 15:30 **Coffee break**

15:30 - 16:00 **Thomas Wolf** **Parametric Solution of Underdetermined linear ODEs**

Day 2. Bricker Academic Building, room 202 (BA 202)

9:30 - 10:00 **Sergei Abramov** **Hypergeometric summation revisited**

10:00 - 10:30 **Doron Zeilberger** **A Brief History of Summation**

10:30 - 11:00 **Bruno Salvy** **Fast compact solutions of linear differential or difference equations and applications**

11:00 - 11:30 **Coffee break**

11:30 - 12:00 **Gaston Gonnet** **A quarter century of Maple, past and future**

12:00 - 12:30 **Moulay Barkatou** **On Exponential Parts of Solutions of a Linear Differential System**

12:30 - 14:00 **LUNCH**

14:00 - 14:30 **Eugene Zima** **TBA**

14:30 - 15:00 **Stephen Watt** **Making Computer Algebra More Symbolic**

16:00 **Marathon** Join Sergei for jogging at Waterloo Park.

18:00 **DINNER at Paul Martin Center, WLU**

Day 3. Bricker Academic Building, room 202 (BA 202)

9:30 - 10:00 **Jürgen Gerhard** **Rational Summation and Shiftless Factorization**

10:00 - 10:30 **George Labahn** **Properties of Sigma Basis**

10:30 - 11:00 **Rob Corless** **What's ν about the derivative, a Reprise**

11:00 - 11:30 **Coffee break**

11:30 - 12:00 **Ziming Li** **Some Recent Results on Finite-Dimensional Linear Function Systems**

12:00 - 12:30 **Luc Rebillard** **`OrthogonalSeries`, a few years later**

12:30 **Closing**