Alberta Conference for Young Researchers in Mathematics April 9-10, 2005 Schedule

Saturday, April 9

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12:00 to 13:00 Welcome reception and LUNCH in the U of C Dept. of Math. & Stats lounge (4th floor of the Math Sciences Building room MS461). 13:00 to 14:30 Session 1 14:30 to 15:00 Break 15:00 to 16:30 Session 2 16:30 to 17:00 Break 17:00 to 18:00 Session 3 19:00 to 21:00 Dinner Banquet at the U of C Faculty Club.
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Sunday, April 10

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09:00 to 10:20 Session 4
10:20 to 10:35 Break
10:35 to 11:15 Session 5
11:15 to 12:00 Plenary meeting and farewell reception. Light refreshments will be provided.
12:00 U of A students depart.
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Room numbers:

Section 1: MS431 (Math. & Stats building, fourth floor) Section 2: MS427 (Math. & Stats building, fourth floor) Section 3: MS371 (Math. & Stats building, third floor) Dept. Lounge: MS461 (Math. & Stats building, fourth floor)

Section 1 in MS431

Saturday Session 1

A Game of Cops and Robber, 40min. Adrian Tang, University of Calgary Art and Geometry, 40min. Bouchra Sabbagh, University of Calgary

Session 2

Introduction to Seifert manifolds, 40min.

Satoshi Tomoda, University of Calgary

On Quasiuniform convergence, 25 min.

 ${\it Damir~Kinzebulatov}, \, {\it University~of~Calgary}$

Banach-Mazur Distance and Random Convex Bodies, 25min.

Peter Pivovarov, University of Alberta

Session 3

Using History to Teach Mathematics, 15min.

Tina Rapke, University of Calgary

Some history of analysis and France at the turn of the 19th century, $40 \mathrm{min}$.

Garth Boucher, University of Calgary

Sunday

Session 4

Antipodal sets in Hyperbolic spaces, 40min.

Marton Naszodi, University of Calgary

Uniformly distributed sequences: some examples and conjectures, $25 \mathrm{min}$.

Omar Rivasplata, University of Alberta

Session 5

Calculus on Subcartesian Spaces, 40min.

 $Jordan\ Watts,$ University of Calgary

Section 2 in MS427

Saturday Session 1

Algebraic Cryptography, 40min.

Dr. Stephane Lemieux, University of Calgary

Redundant Number Systems in Cryptography, 25min.

Kjell Wooding, University of Calgary

Relation Algebras, 25min.

Csaba Henk, University of Calgary

Session 2

An Introduction to Ball-Polytopes and 1-Convexity., 40min.

Peter Papez, University of Calgary

 $-1 = 1 + 2 + 4 + 8 + 16 + 32 + \dots, 25$ min.

Tracy Walker, University of Calgary

Non commutative function spaces, 25min.

Shawn Desaulniers, University of Alberta

Session 3

A geometric interpretation of the trace of a matrix, 15min.

Lynn Dover, University of Alberta

Derivation of Prey-taxis and Its Application, 25min.

Jungmin Lee, University of Alberta

Sunday Session 4

On the Relative Distances of Seven Points in a Plane Convex Body, 40min.

Dr. Zsolt Langi, University of Calgary

Optimal Two-Period Two-Treatment Repeated Measurement Designs With Or Without Baseline Measurements, 25min.

Yuanyuan Liang, University of Alberta

Session 5

Is there a m-th root for y in G?, 40min.

Qingquan Wu, University of Illinois

Section 3 in MS371

Saturday Session 1

Strange Attractor of the Henon Map, 40min.

Matthew Emmett, University of Calgary

An Axiomatic Approach to Primary Degree, 40min.

Haibo Ruan, University of Alberta

Session 2

Lyapunov Functions and Global Dynamics of A Mathematical Model of Tuberculosis (TB), 40min.

Hongbin Guo, University of Alberta

Minimum Hellinger Distance Estimators for Mixing Proportions: Finite Support Case, 25min.

Jingjing Wu, University of Alberta

A group sequential test with longitudinal data, 25min.

Eunha Yang, University of Alberta

Session 3

Estimating sensitivity and Specificity for Binocular Data: Application in Ophthalmology, 15min.

Meijie Guo, University of Calgary

Asymptotic Behavior of Solutions to Dissipative Nonlinear Evolutions with Ellipticity, 40min.

Zhian Wang, University of Alberta

Sunday Session 4

Pseudospectrum, 25min.

Bryan Quaife, University of Calgary

An analysis of chaotic behavor in a networked control systems, 25min.

Guofeng Zhang, University of Alberta

On Milloux's Theorem, 25min.

Qian Wang, University of Alberta

Session 5

Pricing on a two interest rates jump diffusion financial market, 25min. Selly Kane, University of Alberta

Financing Conditions in Small Canadian Businesses – An Introduction to Boosting Method, 25min.

Shali Zhang, University of Calgary