West Coast Number Theory Conference
December 16—20, 2007

MONDAY

Algebraic Number Theory Session – Helen Grundman

9:00 Leanne Robertson Monogeneity in cyclotomic fields
9:20 Leon McCulloh Stickelberger evolution (a new branch)
9:40 Vinod Radhakrishivan Galois representations attached to elliptic curves
10:00 Patrick Rault On uniform bounds for rational points on rational curves and thin sets

10:20 Announcements/BREAK

10:50 Darrin Doud Local corrections of discriminant bounds and small degree extensions of quadratic fields
11:10 Jeff Achter Permutation polynomials and exceptional covers
11:30 Rachel Pries Absolutely simple Jacobians of given genus and p-rank

12:00 LUNCH

Elementary Number Theory Session – Doug Iannucci

1:30 Jasbir Chahal A fake zeta function
1:50 Helen Grundman Semihappy numbers
2:10 Pante Stanica Sums of Thue-Morse sequences over arithmetic progressions
2:30 Carrie Finch On the irreducibility of polynomials which are sums of polynomials with distinct cyclotomic factors

2:50 BREAK

3:20 Doug Iannucci Catalan numbers, factorials, and sums of aliquot parts
3:40 Florian Luca Variants of Sierpinski numbers
4:10 Sam Wagstaff Congruences for sums of squares

4:30 FIRST PROBLEM SESSION – Gerry Myerson
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TUESDAY

Analytic Number Theory Session – Gary Walsh

9:00 Gerry Myerson *Trifectas in geometric progression*
9:20 Wendell Ressler *Hecke groups and reduction of a $\lambda$-binary quadratic forms*
9:40 David Cardon *On a conjecture related to the sum of the Möbius function*
10:00 Xian-Jin Li *On the Euler product of some zeta functions*

10:20 Announcements/BREAK

Miscellaneous Session—Gary Walsh

10:50 Geoffrey Apel *Proving certain identities using modular forms*
11:10 Michael Knapp *Homogeneous equations over p-adic fields*
11:30 Gary Walsh *Arithmetical Properties of a sequence of integers associated to a family of simultaneous Pell equations*

12:00 LUNCH

AFTERNOON EXCURSIONS
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WEDNESDAY--REVISED

Computational Number Theory Session – Andrew Shallue

9:00 Eric Landquist *Class number computation in cubic function fields*
9:20 Pieter Rozenhart *The Davenport-Heilbronn theorem and binary cubic forms*
9:40 Alan Silvester *Principle ideal testing (in real quadratic fields)*
10:00 Adrian Tang *Computing fundamental unit of function fields of unit rank one*

10:20 Announcements/BREAK

10:50 Eric Roettger *A cubic extension of the Lucas functions*
11:10 Kjell Wooding *Current techniques in sieve design*
11:30 Jonathan Webster *Cubic function fields in Char(k)=3*

**12:00 LUNCH**

(Computational Con’t.)

1:30 Qingquan Wu *Integral bases and signatures of radical function fields*
1:50 Peter Montgomery *Improved p±1 stage 2*
2:10 David Bailey *Experimental math, number theory and mathematical physics*
2:30 Matthew Musson *The elliptic curve discrete logarithm problem and the GHS attack*

**2:50 BREAK**

Miscellaneous Session – John Burke

3:20 Bill Rowan *Sketch of an abelian category for abelian topological groups*
3:40 David Moulton *Averaging points two at a time*
4:10 Alain Togbe *On the positive integral solutions of the Diophantine equation*
   \[ X^3 + by + 1 - xyz = 0 \]
4:30 Andrew Shallue *Fixed weight subset sum problem*

**4:50 Business Meeting and 2ND Problem Session**

**6:00 DINNER**

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**THURSDAY**

Historical Session –

7:30 Pick up box lunches (if ordered) at breakfast
9:00 Informal discussion of past conferences and problems

Break—delivered at 9:30.

11:30 Farewell and check out

12:00 LUNCH