Abstract. This document contains the details of QVNTS over the last thirty years!


People who have spoken often


Locals: David Dummit (39 times, last time: 11 Jan 2001), Ram Murty (31), H. Kisilevsky (26), J. Sands (18), H. Darmon (17), E. Goren (13), A. Iovita (13), A. Granville (9), D. Dorman (8), C. David (6), J. Labute (6), R. Foote (5),...
Fall 2010

Sept. 9 Jared Weinstein (IAS), Local Langlands and the tower of modular curves
Cristian Popescu (UCSD), An Equivariant Main Conjecture and Applications
Antonella Perucca (EPFL Lausanne), The order of the reduction of points on abelian varieties

Sept. 23 Fabrizio Andreatta (Milano), $p$-adic modular forms via $p$-adic Hodge-Tate theory
Kaisa Matomaki (University of Turku, Finland), Distinguishing cusp forms by looking at signs of their Fourier coefficients

Oct. 7 Manjul Bhargava (Princeton), Orbits of group representations, and arithmetic applications (I)
Manjul Bhargava (Princeton), Orbits of group representations, and arithmetic applications (II)

Oct. 21 Xevi Guitart (McGill, Barcelona), L-series of building blocks
Manjul Bhargava (UPC Barcelona), From quaternion orders to generalized reduced binary quadratic forms, through Shimura curves and CM points

Nov. 4 Dimitris Koukoulopoulos (CRM), Generalized multiplication tables of integers
Nicolas Templier (Princeton), On the sup-norm of automorphic forms

Nov. 9 David Grant (Boulder, Concordia), Analytic theory of genus 2 curves

Nov. 18 Bruce Berndt (UIUC), The circle and divisor problems, Bessel series, and twisted divisor sums
Alex Kontorovich (Stony Brook), Sieving in groups

Dec. 2 Kirsten Wickelgren (Harvard), Etale $\pi_1$ obstructions to rational points
Joseph Rabinoff (Harvard), Canonical subgroups for $p$-divisible groups

Dec. 16 Andrew Granville (U de M), A pretentious approach to analytic number theory
David Grant (Boulder, Concordia), Integral division points on curves
Jan. 21 **Victor Rotger** (UPC Barcelona), *Stark-Heegner points and the vanishing of Selmer groups of elliptic curves over real quadratic fields.*

**Aaron Levin** (IAS), *Towards Schmidt’s Theorem for Algebraic Points of Bounded Degree*

Jan. 28 **Kumar Murty** (U. Toronto), *The field of Fourier coefficients of a modular form*

**Kimberly Hopkins** (UT Austin), *Higher Weight Heegner Points*

Feb. 11 **Felipe Voloch** (U. Texas at Austin), *Local-Global principles for affine curves*

**Adam Logan** (Montreal), *The two faces of the Kummer surface*

Feb. 22-26 CRM/Magma Conference on *p*-adic $L$-functions

Mar. 8-12 CRM Workshop on Graphs and Arithmetic

Mar. 18 **Michael Larsen** (Indiana U.), *The inverse Galois problem for Mordell-Weil modules*

**M. Ram Murty** (Queen’s University), *Transcendental values of modular forms*

Mar. 22-26 CRM Workshop on Computer Methods for $L$-functions and Automorphic Forms

Apr. 1 **Danny Neftin** (Technion), *On the minimal ramification problem for semiabelian groups*

Apr. 12-16 CRM Conference on Computer Security and Cryptography

Apr. 19-23 CRM Workshop on Counting Points – Theory, Algorithms and Practice

Apr. 29 **J.-F. Mestre** (Université Paris 7), *Courbes de genre 3 avec un groupe d’automorphismes isomorphe à $S_3$*

May 6 **G. Ricotta** (Bordeaux), *Automorphic forms as functions on $GL(n, R)$*
Sept. 10 Melanie Matchett Wood (Stanford), *Spaces for Rings and Ideals*
Jack Sonn (Haifa), *On the minimal ramification problem for nilpotent groups*
Andrew Yang (Dartmouth), *Low-lying zeros of Dedekind zeta functions attached to cubic number fields*

Sept. 24 Ignazio Longhi (Taipei), *Coleman power series and $L$-functions in characteristic $p$*
Tim Dokchitser (Cambridge), *On the parity conjecture for elliptic curves*
Wansu Kim (Cambridge), *Galois deformation theory for norm fields*

Oct. 15 Andrew Knightly (Maine), *Relative trace formulas on GL(2)*
Bryden Cais (CICMA), *Hida families for GL(2) and $p$-adic Hodge theory*

Oct. 22 Ambrus Pál (Imperial College London), *The Manin constant of elliptic curves over function fields*
Tom Tucker (Rochester), *Dynamical Manin-Mumford, dynamical Mordell-Lang*

Nov. 5 Chris Skinner (Princeton), *$p$-adic families of automorphic forms and their applications*
Vladimir Berkovich (Weizmann Institute), *Integration of 1-forms on $p$-adic analytic spaces*
Glenn Stevens (Boston U.), *$p$-Adic Variation of the Jacquet-Langlands Correspondence a Geometric Approach*

Nov. 12 Vladimir Berkovich (Weizmann Institute), *Introduction to Analytic Spaces* (I)
Bill Casselman (UBC), *The Fundamental Lemma for SL(2)*
Vladimir Berkovich (Weizmann Institute), *Introduction to non-Archimedean Analytic Spaces* (II)

Nov. 19 Emmanuel Kowalski (IAS and Zurich)
Matilde Lalín (Edmonton and Université de Montréal), *On higher Mahler measures*
Hedi Daboussi (Laval and Paris-Sud)

Dec. 3 Xinyi Yuan (Harvard), *A formulation of the Dynamical Manin-Mumford conjecture*
Ye Tian (Chinese Academy), *An explicit form of Waldspurgers formula.*
Winter 2009

Jan. 8 Ameya Pitale (Oklahoma) \(L\)-functions for \(\text{GSp}(4) \times \text{GL}(2)\)
JeeHoon Park (CICMA and McGill) Iwasawa main conjecture for CM elliptic curves at supersingular primes

Jan. 9 Ameya Pitale (Oklahoma) \(L\)-functions and special value results

Jan. 14 Mike Zieve (IAS) Polynomial mappings

Jan. 15 Mike Zieve (IAS) The intersection of subfields of \(K(x)\)

Feb. 12 Matthew Young (Texas) Quadratic and cubic twists of \(L\)-functions

Feb. 19 Gerard Freixas (CICMA) Introduction to the arithmetic Riemann-Roch theorem, I
Gerard Freixas (CICMA) Introduction to the arithmetic Riemann-Roch theorem, II

Mar. 5 Chung Pang Mok Heegner points and \(p\)-adic \(L\)-functions for elliptic curves over totally real fields
Eyal Goren Canonical subgroups over Hilbert modular varieties

Mar. 12 Chantal David (CICMA) Statistics for the traces of cyclic trigonal curves over finite fields
David Zywina (UPenn) Explicit Hilbert Irreducibility

Mar. 19 Valentin Blomer (Toronto) Bounding sup-norms of cusp forms
Masataka Chida (Kyoto, visiting CICMA) Selmer groups and central values of \(L\)-functions for modular forms

Mar. 26 Florian Herzig (Northwestern) Weight Cycling and Serre-type Conjectures
Bjorn Poonen (MIT) Existence of rational points on smooth projective varieties

Apr. 16 Alexandru Buium Independence of modular points on elliptic curves
Min-Lung Hsieh (McMaster) On the main conjectures for CM fields

Apr. 23 Ling Long (Iowa) Noncongruence modular forms and modularity
Gerard Freixas (CICMA) On the Riemann-Roch formula in Arakelov geometry and the Jacquet-Langlands correspondence

May 14 Ben Howard (Boston College) Hirzebruch-Zagier divisors and CM cycles on Hilbert modular surfaces
Andrea Miller (Harvard) On Murre’s conjecture for mixed Kottwitz surfaces

May 21 Igor Shparlinski (Sydney) Fermat quotients
Bill Messing (Minnesota) Recent Progress in the Theory of Displays (d’apres Lau)
Aug. 26 **Helmut Koch** (Humboldt) *The correspondence of Leonhard Euler and Christian Goldbach*

**Jack Sonn** (Technion) *Abelian extensions of global fields with all local degrees equal to n and the n-torsion subgroup of the Brauer group*

Sept 18 **Adrian Vasiu** (Binghamton) *Integral canonical models of Shimura varieties of Hodge type*

**Xander Faber** (CICMA) *The Arithmetic of Orbits for Quadratic Dynamical Systems*

Oct 2 **Jonathan Pottharst** (Boston) *Selmer groups over eigenvarieties*

**Zeev Rudnick** (Tel Aviv) *L-functions and their statistics over function fields*

Oct 16 **Mike Rubinstein** (Waterloo) *Lower terms in the moments of L-functions*

**Jordan Ellenberg** (Wisconsin) *Random matrices, random permutations, conjectures of arithmetic distribution over function fields, topology of Hurwitz spaces*

Oct 30 **Kevin James** (Clemson) *Elliptic curves and the distribution of primes*

**Soroosh Yazdhani** (McMaster) *Local Szpiro’s Conjecture*

Nov. 10 **Roman Holowinsky** (Toronto) *The Rudnick-Sarnak Conjectures*

Nov. 13 **Yuri Bilu** (Bordeaux and ALGANT) *Galois representations and Runge’s method*

**Donghoon Park** (Brown) *1-motives with torsion and Cartier duality*

Nov. 27 **Alina Bucur** (MIT) *Multiple Dirichlet series*

**Laurent Fargues** (Orsay and Princeton) *Reduction Theory for p-Adic Moduli Spaces of Abelian Varieties and p-Divisible Groups*

**Vinayak Vatsal** (UBC) *Theta functions after Waldspurger and Mumford*

Nov. 28 **Kiran Kedlaya** (MIT) *p-adic differential equations*

Dec. 4 **Jayce Getz** (IAS) *Relative trace formulae with a view towards unitary groups*

**Matt Greenberg** (Calgary) *L-invariants of modular forms and completed cohomology of Shimura curves*

Dec. 5 **Jayce Getz** (IAS) *Trace Formulae and Locally Symmetric Spaces*

Dec. 9 **Mirela Ciperiani** (Columbia) *Genus one curves over the rationals*

Dec. 10 **Cristian Virdol** (Columbia) *On zeta functions of twisted modular curves*
Dec. 11 Cristian Virdol (Columbia) On the Tate conjecture for quaternionic Shimura varieties
  John Voight (UVM) Computing automorphic forms on Shimura curves

Dec. 17 Ritabrata Munshi (Rutgers) Rational Points on Surfaces

Dec. 18 Ritabrata Munshi (Rutgers) Nonvanishing of $L$-functions
  Xander Faber (CICMA) Prime factors of dynamical sequences
Winter 2008

Jan. 10 Adrian Vasiu Good reductions of abelian varieties over number fields
    Shahab Shahabi (McGill) $p$-adic deformations of Shintani cycles

Jan. 17 Fabrizio Andreatta (Milano) Fontaine’s crystalline conjecture revisited

Jan. 21 Matthias Strauch (Cambridge) $p$-adic Galois representations and geometric constructions of Banach space representations

Jan. 24 Romyar Sharifi (McMaster) Investigations in the arithmetic of cyclotomic fields and modular curves
    Byoung-Du Kim Iwasawa theory of elliptic curves for supersingular primes
    Capi Corrales (Madrid) On the group of units of an order in a non-split quaternion algebra

Feb. 7 Hershy Kisilevsky Mordell-Weil groups over cyclic quintic extensions
    Henri Darmon (McGill) Modular points on elliptic curves and cycles on Shimura varieties

Feb. 21 Fernando Rodriguez-Villegas (Austin) Mixed Hodge polynomials of character varieties
    Patrick Ingram (Toronto) Arithmetic questions about iterates of quadratic polynomials

Mar. 13 Matilde Lalin (University of Alberta) Mahler measures and regulators
    Adrian Iovita Jacquet-Langlands correspondence for $p$-adic families of modular forms

Mar. 20 Cristina Ballantine (Holy Cross) Biregular expanders and the Ramanujan Conjecture
    Brooke Feigon (Toronto) Averages of central $L$-values of Hilbert modular forms

Apr. 17 Tonghai Yang (Wisconsin) Arithmetic Intersection and the Chowla-Selberg formula
    Cristian Popescu (UCSD) On the Coates-Sinnott Conjectures
    Karl Mahlburg (MIT) Asymptotics for partitions without sequences

May 8 Abhinav Kumar (MIT) Kummer surfaces, Shioda-Inose Structures, and real multiplication
    Christophe Breuil (IHES and Columbia) Towards a modulo $p$ Langlands correspondence for $GL_2(F)$

May 27 Ritabrata Munshi (Rutgers) Counting rational points on cubics and quartics
    Tong Liu (Upenn) A bound on ramification of $pn$-torsion semistable representations

May 28 Gaetan Chenevier (Paris) Zariski density of modular points for $U(3)$
    Brian Conrad (Michigan) Finiteness of class numbers over global function fields
FALL 2007

Sept 20 Payman Kassaei (London) Canonical subgroups of abelian varieties
Wee-Teck Gan (UCSD) The local Langlands conjecture for GSp(4)

Sept 29-30 Quebec-Maine conference

Oct 4 Joel Bellaiche (Columbia) Non smooth classical point on eigenvarieties
Matthew Greenberg (MPI) Stark-Heegner points for elliptic curves over totally real fields
Igor Shparlinski (Sydney) Lang-Trotter and Sato-Tate conjectures on average

Oct 18 Jeehoon Park (CICMA) The Eisenstein-Siegel distribution and $p$-adic zeta function of real quadratic fields
Bryden Cais (CICMA) Integral structures on the de Rham cohomology of curves and abelian varieties

Nov. 1 Akshay Venkatesh (NYU) Analytic number theory over function fields and related questions in geometry and topology
Riad Masri (CICMA) Average values of Hecke $L$-functions via Galois suborbits of Heegner points
Isabelle Déchène (Ottawa) Uses of generalized Jacobians in cryptography

Nov. 15 Conference in honor of John Labute

Nov. 22 Ben Green (Cambridge) Equidistribution of nilsequences
Arnaud Chadozeau
Masataka Chida (Tohoku) On the equivariant Tamagawa number conjecture for Hecke characters

Dec. 6 John Voight (Vermont) Shimura curves of low genus and totally real fields of small root discriminant
Bei Zhang (Columbia) Nonvanishing mod $p$ of Eisenstein series
Winter 2007

Jan. 18 Tom Weston (UMass) Deformation theory of modular Galois representations
Michael Filaseta (USC) Applications of Padé approximants to number theory

Feb. 1 Reinier Broker (Calgary) $p$-adic class invariants
Robert Carls (Sydney) Higher dimensional $p$-adic CM construction

Feb. 15 Nigel Boston (Wisconsin) Arboreal Galois representations

Mar. 1 Christian Wuthrich (CICMA)
Pierre Colmez (Jussieu) Sur la correspondance de Langlands locale $p$-adique pour $GL_2(Q_p)$

Mar. 15 Aaron Levin (Brown) Ideal Class Groups and Rational Torsion in Jacobians of Curves
Sinnou David (IAS) Hauteurs sur les puissances de courbes elliptiques
Clifton Cunningham (Calgary) Remarkable properties of some perverse sheaves on $p$-adic groups
Lassina Dembele (Calgary) Explicit Jacquet-Langlands for $GSp(4)$

Mar. 29 Tamar Ziegler (Michigan) TBA
Andrew Knightly (Maine) Asymptotics of Hilbert modular Hecke eigenvalues via relative trace formula
David Lehavi (Michigan) Isogenies between Abelian surfaces

Apr. 12 John Labute (McGill) FAbulous pro-p-groups
Stephen Kudla (Toronto) Arithmetic special cycles for unitary groups

Apr. 26 Kartik Prasanna (Maryland and CICMA) Non-vanishing of $L$-series modulo $p$
Paul Pollack (Dartmouth) Simultaneous Prime Values of Polynomials in Positive Characteristic

July 26 Kartik Prasanna (Maryland and CICMA) Algebraic cycles and Rankin $L$-series
Kartik Prasanna Algebraic cycles on modular varieties and rational points on elliptic curves
Sept 14 **Jean-Pierre Serre** (Collège de France) Variations avec $p$ du nombre de solutions mod $p$ d’un système d’équations  
**Ram Murty** (Queens and McGill) Introduction to the Sato-Tate conjecture

Sept 28 **Igor Wigman** (Montreal) The distribution of lattice points in thin elliptic annuli  
**Kiran Kedlaya** (MIT) Slope filtrations for relative Frobenius: prelude to a $(\Phi,\Gamma)$-module theory in families

Oct 12 **Jeehoon Park** (Boston University) $p$-adic families of half-integral weight modular forms via overconvergent Shintani lifting  
**Henry Kim** (Toronto) Functoriality of symmetric powers of $GL_2$

Oct 26 **Solomon Friedberg** (Boston College) Multiple Dirichlet Series attached to Weyl groups  
**Michael Harris** (Jussieu) Automorphic forms on $GL_n$ and unitary groups, and related Galois representations and Hecke algebras  
**Ambrus Pál** (London) On a conjecture about the cohomology of arithmetic groups

Nov. 9 **Glenn Stevens** (BU) Milnor $K$-groups and Eisenstein Cohomology  
**Hugh Williams** (Calgary) Principal ideal testing

Nov. 16 **Bart DeSmit** (Leiden) Entangled radicals  
**Mirela Ciperiani** (Columbia) Solvable points on genus one curves

Nov. 30 **Richard Taylor** (Harvard) An outline of the proof of the Sato-Tate conjecture  
**Richard Taylor** (Harvard) Proving modularity without Ihara’s lemma  
**Adriano Marmora** (Paris 13 and CICMA) $p$-adic local constants

Dec. 14 **Bas Edixhoven** (Leiden) On the computation of coefficients of a modular form  
**Bas Edixhoven** (Leiden) Height bounds, using Arakelov theory
Jan. 12 Florian Luca (UNAM, Mexico) *On shifted products which are powers*
Bill Banks (Missouri) *Palindromes*

Jan. 19 Adam Logan (Liverpool) *Descent by Richelot isogeny on the Jacobians of plane quartics*
Habiba Kadiri (Montreal) *Explicit zero-free regions for L-functions and applications*
Andrew Granville (Montreal) *Character Sums*

Jan. 26 Jorge Jimenez Urroz (Barcelona) *Almost prime orders of elliptic curves with CM modulo p*
Francesco Pappalardi (University of Rome 3) *On a problem of Schinzel and Wojcik involving equalities between multiplicative orders*
Andrew Booker (Michigan) *Artin L-functions and automorphic forms*

Jan. 27 Kartik Prasanna (UCLA) *Elliptic curves, quadratic twists and L-values*
Adrian Iovita (Concordia) *On the arithmetic of elliptic curves*

Feb. 2 Ernie Croot (Georgia Institute of Technology) *Arithmetic and Geometric Progressions in Thin Sets of Integers*
Greg Martin (UBC) *How unfair are prime number races?*

Feb. 9 Boris Moroz (Max-Planck-Institut) *On the integer points of affine toric varieties*
Nathan Jones (CICMA) *Serre curves and averages of Lang-Trotter constants*

Feb. 16 Workshop on L-functions

Feb. 23 Emmanuel Royer (Montpellier) *Quasimodular forms and applications*
Mark Watkins (Bristol) *Symmetric power L-functions of elliptic curves*

Mar. 2 Guillaume Ricotta (Bordeaux) *Asymptotic height of Heegner points*
Mark Coleman (Manchester) *A Localised Bombieri-Vinogradov Theorem in Imaginary quadratic fields*

Mar. 9 Peng Gao (Michigan) *N-level density of the low-lying zeros of quadratic Dirichlet L-functions*
Nathan Ng (Ottawa) *Discrete Moments of the Riemann zeta function*

Mar. 16 Workshop on Anatomy of Integers

Mar. 23 Antal Balog (Renyi Institute) *Around the Balog-Szemeredi Theorem*
Javier Cilleruelo (UAM, Madrid) *An overlapping theorem with applications*
Apr. 20 Jean-Marc Deshouillers (Bordeaux) Large subsets of $\mathbb{Z}/p\mathbb{Z}$, the subset-sums of which do not cover $\mathbb{Z}/p\mathbb{Z}$
John Friedlander (Toronto) Re-shaping negative impressions, from Judas to Siegel’s zero
Andrew Granville (Montreal) Multiplicative functions in arithmetic progressions

Apr. 27 Manjul Bhargava (Princeton) Lecture I: An overview of Gauss composition and its generalizations
Manjul Bhargava (Princeton) Lecture II: The parametrization of rings of low rank

May 2 Manjul Bhargava (Princeton) Lecture III: Counting field extensions of the rational numbers

May 4 Manjul Bhargava (Princeton) Lecture IV: Mass formulae for local fields, and global heuristics
Anirban Mukhopadhyay (Harish Chandra Research Institute) Gap between critical zeros of Epstein zeta function

June 14 Allison Pacelli (Williams College) Class groups with high $n$-rank
Fall 2005

Sept 2  **Haruzo Hida** (UCLA) *Lambda-adic p-divisible groups over Q*
**Elena Mantovan** (CalTech) *Admissible p-adic representations of GL_2(Q_p)*

Sept 8  **Haruzo Hida** (UCLA) *Lambda-adic p-divisible groups (II) over Q*
**P. Schneider** (Munster) *Admissible p-adic representations of GL_2(Q_p) (study group)*

Sept 22  **Pierre Colmez** (Paris VI) *Trianguline representations and refinements*
**Peter Schneider** (Munster) *The Jacquet functor*

Sept 29  **Pierre Colmez** (Paris) *GL_2(Q_p)-representations attached to trianguline Galois representations*
**Adrian Iovita** (Concordia) *Local-Global compatibility in the p-adic Langlands program*

Oct 13  **Song Wang** (Vermont) *Dimension Data, Local and Global Conjugacy*
**Pierre Colmez** (Paris) *GL_2(Q_p)-representations attached to trianguline Galois representations II*

Oct 20  **Alexei Skorobogatov** (Imperial College) *Rational points on certain Kummer surfaces* (joint work with Peter Swinnerton-Dyer)
**Ronald Van Luijk** (CRM) *Explicit examples of generic K3 surfaces with infinitely many rational points*

Oct 27  **Emrah Cakcak** (Laval) *Subfields of the function field of the Deligne-Lusztig-Ree curve and their number of rational places*
**Maria Sabitova** (CRM and CICMA) *Root numbers of abelian varieties*

Nov 1-3  Grass-roots workshop on the Stark conjectures

Nov. 10  **Lin Weng** *Non-abelian L-functions*
**Jacques Tilouine** (Paris-Nord) *Galois representations and modular forms of low weight*
**Maria Sabitova** (CICMA) *The orbit method for p-groups and pro-p groups*

Nov. 17  **Jean-Pierre Serre** (Collège de France) *Bounds for the orders of the finite subgroups of G(k)*
**Jean-Pierre Serre** (Collège de France) *Bornes pour les ordres des sous-groupes finis de G(k) (suite)*

Nov. 24  **Yoshitaka Hachimori** (CICMA) *A survey on the main conjecture in noncommutative Iwasawa Theory*
**Ye Tian** (CICMA) *Heegner points over False Tate curve extensions*
**Eknath Ghate** (Cornell) *Local splitting of ordinary Galois representations*
Dec. 1 Adebisi Agboola (UCSB) Assorted conjectures and results on Rubin’s variant of the Birch and Swinnerton-Dyer conjecture for elliptic curves with complex multiplication, with special attention to elliptic curves of analytic rank zero
Gonzalo Tornaria (CICMA) Brandt modules, Shimura correspondence, and the central values of twisted $L$-series

Dec. 8 Matteo Longo On the Birch and Swinnerton-Dyer conjecture over totally real fields
Vicentiu Pasol Weil representations and the Eisenstein distribution

Dec. 29 Adrian Iovita The $p$-adic Langlands program: some New Year predictions
Adrian Iovita The $p$-adic Langlands program: some New Year predictions (II)
Jan. 6 **John Labute** (McGill) *Galois Groups of $p$-Extensions $Q$ With Restricted Ramification*

**Eyal Goren** (McGill) *Progress on the problem of constructing higher analogues of elliptic units*

Jan. 20 **Romyar Sharifi** (McMaster) *Cup products, Iwasawa theory, and the Eisenstein ideal*

**Alexandru Ghitza** (CICMA) *Weight 1 weirdness*

**Jonathan Pila** (McGill) *Density of rational points*

Feb. 3 **Wenzhi Luo** (Ohio State) *Nonvanishing theorems for automorphic $L$-functions on $GL(n)$*

**Damien Roy** (University of Ottawa) *Diophantine approximation in small degree*

**Andrew Granville** (Universite de Montreal) *The Polya-Vinogradov Theorem revisited*

Feb. 17 **David McKinnon** (Waterloo) *Rational approximation of rational points on varieties*

**Denis Thérien** (McGill) *Number-theoretic issues in boolean circuit complexity*

Mar. 3 **Farshid Hajir** (Amherst) *Finitely Ramified Iterated Monodromy Representations*

**Jason Lucier** (Waterloo) *Differences of integers*

Mar. 17 **Alexandru Popa** (Princeton) *Closed geodesics on modular curves and special values of $L$-series*

**Jorge Devoto** (Buenos Aires) *An introduction to elliptic cohomology and $K3$ cohomology*

**Nora Ganter** (Urbana-Champaign) *Introduction to equivariant elliptic cohomology*

Mar. 31 **Ali Ozluk** (University of Maine) *One-Level Density Conjecture for Quadratic Dirichlet $L$-functions*

**Pierre Charollois** (Bordeaux) *Stark units and periods of Hilbert modular forms*

Apr. 7 **John Cremona** (Nottingham) *Finding all elliptic curves with good reduction outside a given set of primes*

**Gergely Harcos** (University of Texas) *A Burgess-like subconvex bound for twisted $L$-functions*

**Nyandwi Servat** (Université de Tunis El Manar) *Moyenne de la fonction de Piltz sur les entiers sans grand facteur premier*

Apr. 21 **David Savitt** (CICMA) *The level 1 case of Serre’s conjecture (after Khare and Khare-Wintenberger)* I

**David Savitt** (CICMA) *The level 1 case of Serre’s conjecture (after Khare and Khare-Wintenberger) II*
May 5  **R. Sujatha** (Tata Institute) *Iwasawa theory over p-adic Lie extensions*
  **Peter Clark** (CICMA) *Arithmetic of algebraic curves with Galois Belyi maps*
  **John Coates** (Cambridge) *Iwasawa Theory for the False Tate Curve Extension*

May 26  **Gregory Freiman** (Tel Aviv)
Fall 2004

Sept 16  Dino Lorenzini (University of Georgia) Some consequences of a theorem of M. Raynaud
Kartik Prasanna (UCLA) Arithmetic properties of the theta correspondence and periods of modular forms
Chantal David (Concordia) Vanishing of L-functions and Random Matrix Theory

Sept 23  Haruzo Hida (UCLA) The integral basis problem of Eichler
Ye Tian (CICMA) Euler systems of CM points over totally real fields

Oct 7  Jean-Louis Colliot-Thelene (Paris-Sud) Points rationnels et zéro-cycles sur les groupes linéaires
Harald Helfgott (CICMA) On the number of elliptic curves of a given conductor

Oct 14  Payman Kassaei (CICMA) On classicality of overconvergent modular forms
Marvin Knopp (Temple University) Vector Valued Modular Forms

Oct 28  Guillaume Ricotta (CICMA) Real zeros and size of Rankin-Selberg L-functions in the level aspect
Yoshikata Hachimori (CICMA) On Iwasawa theory for p-adic Lie extensions

Nov. 11  Akshay Venkatesh (NYU/CMI) Equidistribution and subconvexity
Manfred Einsiedler (Universitat Wien and Princeton) Applying measure rigidity for the Cartan action, Littlewood’s conjecture and more
Peter Clark (CICMA) Bounds for torsion on anisotropic abelian varieties

Dec. 9  Mark Kisin (Chicago) F-crystals and crystalline representations
Jordan Ellenberg (Wisconsin) Descent bounds for rational points on some curves and higher-dimensional varieties
Gabor Kun (Eotvos Universtity, Budapest) On the prime values of reducible polynomials
Jan. 8 Jean-Francois Mestre (Université Paris 7) Relèvements d’extensions galoisiennes
Peter Clark (CICMA) The period-index problem and its applications to horizontal growth of the Shafarevich-Tate group
Sandor Kovacs (Washington) Nowhere vanishing one-forms and Kodaira dimension

Jan. 22 Harold Stark (UCSD) Class numbers and Siegel zeroes
Carl Pomerance (Dartmouth College) Primality testing after Agrawal, Kayal and Saxena
Henri Darmon (McGill) Hida families and rational points on elliptic curves

Feb. 5 Cam Stewart (Waterloo) Irregularities of distribution and pseudorandom sequences
Peter Schneider (Muenster University / University of Chicago) Duality for locally analytic representations
Igor Shparlinski (Macquarie University) Prime divisors of shifted factorials

Feb. 19 Greg Martin (UBC) The Mobius function to the rescue
David Savitt (CICMA) A conjecture of Conrad, Diamond, and Taylor

Mar. 4 Kiran Kedlaya (MIT) Monodromy of families of $p$-adic differential equations
Scott Ahlgren (Urbana) Coefficients of half-integral weight modular forms modulo prime powers
June Zhu (McMaster) Limit behavior for Zeta-functions of generic Artin-Schreier curves

Mar. 18 Ben Green (Cambridge) The restriction phenomenon in number theory
Michael Bennett (UBC) Powers in Recurrence Sequences

Apr. 1 Alan Lauder (Oxford) Rigid cohomology and $p$-adic point counting
Nike Vatsal (UBC) Local behaviour of ordinary representations
Eyal Goren (McGill) Class invariants and units for quartic CM fields

Apr. 8 Lucien Szpiro (CUNY) Mahler measure for dynamical systems
Eric Urban (Columbia) The Eigenvariety for reductive groups $G$ having discrete series
Keith Conrad (Connecticut) Variation of Root Numbers

Apr. 15 Gordan Savin (Utah) What is a minimal representation?
Fernando Rodrigues Villegas (Texas) On the $E$-polynomial of a certain character variety
Robert Osburn (Queens) Congruences for traces of singular moduli

Apr. 29 Mei-Chu Chang (UC Riverside) On sum and product sets
Chandrashekhar Khare (Utah) Limits of $p$-adic Galois representations
Fall 2003

Sept 11 Adrian Iovita (Concordia University) *Anticyclotomic Main Conjecture for supersingular elliptic curves*
Jonathan Sands (University of Vermont) *Popescu’s conjecture in multi-quadratic extensions of number fields*
Norbert Scholmiuck (Université de Montréal) *Remembering André Weil*

Sept 25 Kannan Soundararajan (University of Michigan) *Large values of trigonometric series*
Valentin Blomer (University of Toronto and Stuttgart University) *On sums of squareful numbers*
Jonathan Pila (McGill University) *Some diophantine geometry of subanalytic sets*

Oct 9 Christopher Hughes (American Institute of Mathematics) *Moments of the Riemann zeta function*
Elena Montavan (Berkeley) *On certain PEL type Shimura varieties*

Oct 23 Fabrizio Andreatta (University of Padova) *Hensel’s lemma for torsors and applications to the canonical subgroup*
Alexandru Ghitza (CICMA) *Siegel modular forms (mod p) and algebraic modular forms*

Oct 27 John Conway (von Neumann Professor, Princeton University) *Discrete groups and the Monster - and more*

Nov. 6 Habiba Kadiri (CICMA) *Zero-free regions for the Dirichlet L-functions*
Gary Walsh (University of Ottawa) *On the arithmetical structure of terms in Lucas sequences*

Nov. 20 Stéphane Fischler (Ecole Normale Supérieure) *Interpolation on algebraic groups*
Payman Kassaei (CICMA) *Families of modular forms on Shimura curves*
Jack Sonn (Technion) *Abelian extensions of number fields with constant local degrees*

Dec. 4 Gil Alon (CICMA) *Calculations on the cohomology of p-adic symmetric spaces and their associated buildings*
Ambrus Pal (CICMA) *On the torsion of the Mordell-Weil group of Drinfeld modular curves*
Winter 2003

Jan. 16 Andrew Granville (Université de Montréal) Residue Races, and misleading things that arithmetic geometers say
Adrian Iovita (Concordia) $p$-adic families of exponential maps

Jan. 30 Andrew Booker (Princeton) Converse theorems and Artin’s conjecture
Ben Howard (Harvard) Anticyclotomic Iwasawa theory of elliptic curves
Henri Darmon (McGill) Elliptic curves of large rank over function fields

Feb. 13 Christopher Skinner (Michigan) $p$-adic $L$-functions and anticyclotomic main conjectures for unitary groups
Tonghai Yang (Madison) On CM abelian varieties over an imaginary quadratic field
Matthias Beck Dedekind sums: a geometric viewpoint

Feb. 20 Jonathan Pila (IAS and University of Melbourne) Density of integer and rational points on curves and surfaces
David Cox (Amherst) Why Eisenstein proved the Eisenstein Criterion and why Schnemann proved it first
Andrew Granville (Université de Montréal) The ABC’s of Goldbach

Feb. 21 Jonathan Pila (IAS and University of Melbourne) Algorithms with curves over finite fields

Mar. 6 Preda Mihailescu Zooming into Catalan’s conjecture
Preda Mihailescu Zooming into Catalan’s conjecture
Ambrus Pál (CICMA) Regulators and reciprocity laws on curves

Mar. 13 Gebhard Boeckle (ETH) An Eichler-Shimura type isomorphism for Drinfeld modular forms
Serge Lang (Yale) Spherical inversion on totally geodesic embeddings
Hershy Kisilevsky (CICMA) Ranks of Weil curves over cyclotomic fields

Mar. 20 Kristin Lauter (Microsoft) Complex multiplication methods for generating curves over finite fields

Mar. 27 Bo-Hae Im (Indiana) The rank of elliptic curves over large fields
Robert Pollack (Chicago) A missing $p$-adic $L$-function
Samit Dasgupta (Berkeley) Elliptic units and real quadratic fields

Apr. 10 Michael Rubinstein (AIM) Algorithms and computations in analytic number theory
Andras Biro (Hungarian Academy) On the class number one problem for special real quadratic fields
Andrew Archibald (CICMA) Intersection theory on surfaces – A talk for number theorists
Apr. 24  **Oliver Bultel** (Heidelberg) *L-adic monodromy of abelian varieties in characteristic $p$,*  
**Ron Livné** (Hebrew University) *Higher dimensional analogs of Ramanujan graphs and Hilbert Modular Forms*  
**Yuri Matiyasevich** (Steklov Institute) *Hilbert’s Tenth Problem Today: Main Results and Open Problems*

May 15  **Tom Tucker** (Rochester) *TBA*  
**Alexander Brown** (Claremont) *The endomorphism algebras of modular motives*  
**Ram Murty** (Queens) *An Application of Mumford’s Gap Principle*
Fall 2002

Sept 19 Mak Trifkovic (CICMA) On mu-Invariants of Elliptic Curves over \( Q \)
Brian Conrad (Michigan) Descent theory in non-archimedean geometry

Oct 10 Frauke Bleher (Iowa) Deformations of complexes and applications
Nathan Ng (CICMA) Moments of the Riemann zeta function

Oct 16 Alexandru Ghitza (MIT) Hecke eigenvalues of Siegel modular forms (mod \( p \))

Oct 17 Hui Xue (IAS) Central values for Rankin \( L \)-functions
Stephen Kudla (University of Maryland) An arithmetic theta function
János Kollár (Princeton) Rational varieties over finite fields

Oct 25 Michael Larsen (University of Indiana) Irrationality of motivic zeta-functions

Oct 31 Robert Sczech (Rutgers Newark) A refinement of Stark’s conjecture over complex cubic number fields
Ambrus Pal (CICMA) Rigid analytical class number formula for \( K2 \) of Drinfeld modular curves

Nov. 14 Fred Diamond (Brandeis) Serre weights and nuclear families of Hilbert modular forms
Kevin Buzzard (Imperial College and Harvard)
John Friedlander (Toronto) Uniform Distribution, Large Periods and Cryptography

Nov. 19 Ernst Gekeler (Saarbrucken) Frobenius distributions of elliptic curves over finite prime fields

Nov. 21 Ram Murty (Queens) Ramanujan Graphs

Nov. 28 Alina Carmen Cojocaru (UIUC) Elliptic curves mod \( p \)
Lev Borisov (Wisconsin) Elliptic functions and equations of modular curves

Dec. 5 Adam Logan (CICMA) Calculating Stark-Heegner points attached to periods of Hilbert modular forms
Amod Agashe (Austin) The Birch and Swinnerton-Dyer conjectural formula for modular abelian varieties

Dec. 12 Matt Baker (Georgia) TBA
Matt Papanikolas (Brown) Extensions of elliptic curves over number fields
Jan. 17  **D. Marshall** (McMaster) *Some relationship between Galois group and Iwasawa module structures*  
**R. Sreekantan** (Tata Inst.) *Analog of circular units for products of elliptic curves*

Jan. 24  **Izabella Laba** (UBC) *On finite sets that tile the integers*

Jan. 31  **J. Fleen** (UVM) *The image size of rational maps over finite fields*  
**B. Gross** (Harvard) *Automorphisms of even unimodular lattices*

Feb. 14  **C. Greither** *Recent work on the Brumer-Stark conjecture in extensions of specified degree*  
**L. Berger** (Brandeis) *Limits of crystalline representations*

Mar. 14  **S. Ahlgren** (UIUC) *Weierstrass points on modular curves and supersingular j-invariants*  
**A. Saikia** (CICMA) *Selmer groups of elliptic curves with complex multiplication*

Mar. 21  **S. Lang** (Yale) *On the Bateman-Horn conjecture*  
**E. Goren** (McGill) *Local models and displays*

Mar. 28  **K. Consani** (Toronto) *Arithmetic on a quintic threefold*  
**J. McKay** (Concordia) *Some light on Moonshine?*

Apr. 11  **M. Spies** (Nottingham) *Logarithmic differential forms on p-adic symmetric spaces*  
**G. Shimura** (Princeton) *The relative regulator of an algebraic extension*

Apr. 25  **M. Bhargava** (Princeton) *Higher composition laws and applications to number fields*  
**L. Smithline** (Cornell) *Compact Operators with Rational Generating Functions*
Aug. 16 **Rachel Pries** (Columbia) *Rigidity, Reduction and Ramification*

Aug. 23 **Abdelmejid Bayad** (Evry) *Weierstrass units and Euler Systems*

Sept 6 **I. Vardi** (IHES) *Leading digits, lattice points and algebraic numbers*

Sept 6 **I. Vardi** (IHES) *Leading digits, lattice points and algebraic numbers*

Sept 13 **A. Prasad** (Concordia, McGill & CRM) *On Automorphic Forms for Split Semi-simple Groups on $F_q(t)$*

**A. Iovita** (U. Washington) *Explicit description of the $p$-adic local Galois representations attached to modular forms*

Sept 20 **Alina Cojocaru** (Queens) *Elliptic curves modulo $p$*

**B. Moonen** (Amsterdam) *Serre-Tate theory for PEL moduli spaces*

Oct 4 **D. Savitt** (Concordia, McGill & CICMA) *Modularity of some potentially Barsotti-Tate Galois representations*

**M. Reid** (U. Mass) *Gross’ conjecture, the local Stark conjecture and congruences*

Oct 18 **Ambrus Pal** (Concordia, McGill & CICMA) *Heegner Cycles on Drinfeld Modular Varieties*

**V. Vatsal** (UBC) *Distribution of Heegner Points*

Nov. 1 **S. Wong** (U. Mass) *On the Neron-Severi Group of Fibered Varieties*

**A. Tupan** (Concordia, McGill & CICMA) *Periodicity properties for blocks of coefficients of half integral weight modular forms*

Nov. 15 **Fernando Rodriguez-Villegas** (Austin, Texas & Harvard) *Periods, $L$-functions and Knots*

**Brian Conrey** (AIM) *$L$-functions and random matrix theory*

Nov. 16 **Peter Stevenhagen** (Leiden) *Class invariants using Shimura’s reciprocity law*

Nov. 29 **Natalia Archinard** (Concordia, McGill & CICMA) *Algebraic values of hypergeometric series*

**Dorian Goldfeld** (Columbia U) *Residues of Eisenstein series twisted by modular symbols*

Dec. 6 **Damien Roy** (U. Ottawa) *Duality and simultaneous algebraic approximation*

**J. Fearnley** (Concordia) *Dirichlet twists of modular $L$-functions*
January 11

M. Baker (Harvard) Automorphisms of Modular Curves
Y. Petridis (McGill) Subconvexity results for L-functions and quantum unique ergodicity
D. Dummit (U Vermont) Bicolored Steiner triple systems and a CM elliptic curve

January 25

R. Pries (Columbia) Deformations of wildly ramified covers of curves
K. Murty (Toronto) Splitting of primes in infinite extensions

February 15

C.-F. Yu (Columbia) On the supersingular locus of Hilbert-Blumenthal varieties
M. Emerton (Chicago) Towards a notion of p-adic automorphic representation

March 1

W. Duke (UCLA) Remarks on division fields of elliptic curves
K. Ono (Wisconsin) The arithmetic of Borcherds products and p-adic modular forms

March 15

S. Lang (Yale) Quasi-algebraic closure and rational points on Fano varieties
R. Murty (Queen’s) Pair correlation, Chebotarev and Lang-Trotter

March 29

M. Bhargava (Princeton) The representation of integers by quadratic forms
Shou-Wu Zhang (Columbia) Gross-Zagier formula for GL(2)

April 12

D. Thakur (Arizona) Patterns in finite characteristic numbers
J. Ellenberg (Princeton) Galois representations to GL(2, F_q)

April 19

P. Cassou-Nogues (Bordeaux) Quadratic forms attached to a tame covering of schemes
E. Goren (McGill) Hilbert modular forms: Theta, U, V and filtration

April 26

H. Darmon (McGill) Elliptic curves and class fields
J. Coates (Cambridge) Iwasawa theory of elliptic curves

May 10

C. Stewart (McGill) Universal deformations, rigidity and Ihara’s cocycle
K. Srinivas (Queen’s) On the uniform distribution of certain sequences
K. Chakraborty (Queen’s) Exponent of the class groups of cyclic cubic fields

May 17

B. Mazur (Harvard) A question of signs in the anti-cyclotomic arithmetic of elliptic curves
Quebec-Wide graduate students conference
M. Waldschmidt (Jussieu) Algebraic relations between multiple zeta values
FALL 2000

Sept 7  D. Dummit  (U Vermont) Introduction to the Fontaine-Mazur conjecture - I: The Serre Conjecture
        H. Darmon  (McGill) Introduction to the Fontaine-Mazur conjecture - II: Overview of Taylor’s paper
        F. Pappalardi  (Rome II), Enumerating permutation polynomials

Sept 28  I. Bouw  (U. Penn), Modular curves and reduction of covers
         H. Darmon  (McGill) Introduction to the Fontaine-Mazur conjecture - III: Overview of Taylor’s paper
         E. Goren  (McGill) Introduction to the Fontaine-Mazur conjecture - IV: Approximation theorems

Oct 12  F. Gouvea  (Colby college) (TBC), Where the Slopes Are
         D. Grant  (U. Colorado), Singular Torsion on Elliptic Curves
         J. Silverman  (Brown), Canonical Heights and Lehmer’s Conjecture: Classical, Elliptic and Dynamical

Oct 26  A. Ash  (Boston College), An n-dimensional generalization of Serre’s conjecture
         J. Friedlander  (Toronto), Class group L-functions, amplification, and Kloosterman fractions

Nov. 9  C. Popescu  (John Hopkins), Stark’s question for L-functions of order of vanishing 2 at s=0 and a strong form of Brumer’s Conjecture
         R. Jardine  (U Western Ontario), Stacks and Transfers

Nov. 16  W. Stein, Visibility of Shafarevich Tate groups
         B. Conrad, Breuil modules with examples 1

Nov. 30  E. Goren  (McGill) Introduction to the Fontaine-Mazur conjecture - Part V: Approximation
         H. Kisilevsky  (Concordia) Introduction to the Fontaine-Mazur conjecture - Part VI: Analytic continuation and functional equations of L-functions
         A. Rajaei  (CICMA), Introduction to the Fontaine-Mazur conjecture - Part VII: Associating Galois representations to modular forms

Dec. 7  J. Achter, Counting Hilbert-Blumenthal abelian varieties
         A. Sikora  (CRM & UQAM), Towards unification of number theory and 3-dimensional topology
Winter 2000

Jan. 6  R. Ramakrishna (Cornell) Deforming global Galois representations
       B. Gross (Harvard), Cubic fields and the construction of lattices

Jan. 20 A. Akbary (Concordia) Descending rational points on elliptic curves to smaller fields
       E. Goren (McGill) Hilbert modular forms modulo $p$ and applications

Feb. 3  A. Pal (Columbia) Drinfeld modular curves, Heegner points and interpolation of special values
       D. Abramovich (Boston U) Factorization of birational maps

Feb. 17 P. Gunnells (Columbia) Modular forms, toric varieties, and non vanishing of $L$ functions
       V. Vatsal (UBC), Supersingular points and special values

Mar. 2  A. Agboola (Santa-Barbara) Arithmetic class invariants
       Fabrizio Andreatta (Utrecht & MIT) Neron models of Jacobians of stable curves

Mar. 16 Y. Varshavsky (Toronto) On the characterization of complex Shimura varieties
       S. Lang (Yale), Spectral parabolic induction on $SL_n$

Mar. 30 Ralph Greenberg (U. Washington) The Iwasawa invariants for elliptic curves
       E. Kani (Queen’s) Equivariant Atkin-Lehner theory on $X(N)$

Apr. 13 H. Koch (Berlin) The theorem of Shafarevich in the theory of class formations
       M. Kolster (McMaster) Special values of zeta functions

Apr. 19 M. Kolster The Lichtenbaum conjecture; The $K$-theory of $Z$ and some classical conjectures in number theory
       R. Murty (Queen’s) ABC and prime divisors of Lucas sequences
Fall 1999

Sept 9  Nikolaos Diamantis (McMaster), Period polynomials and derivatives of L-functions
   F. Diamond (Brandeis), Modularity of Elliptic Curves

Sept 23 Masato Kuwata (Caen), Quadratic twists of an elliptic curve and hyperelliptic curves with split Jacobian
   Peter Schneider (Muenster), p-adic boundary values

Oct 7  Catherine O’Neil (MIT), Curves of genus one and their Jacobians
   Srinath Baba (Queen’s), Shimura curve quotients and the Cassels-Tate pairing

Oct 21 Jeremy Teitelbaum (U. Illinois at Chicago), p-adic distributions and continuous p-adic representations
   C. Skinner (IAS), Base Change and a Problem of Serre

Nov. 4  L. Lafforgue (Paris sud), The Langlands conjecture for GL_n over function fields
   H. Darmon (McGill), Uniformization by H x H_p and rational points on elliptic curves

Nov. 18 R. Schoof (Universita’ di Roma, Tor Vergata), Abelian varieties over real quadratic fields with good reduction everywhere
   H. Farkas (Hebrew U.), A problem in combinatorial number theory (the mysterious sevens)

Dec. 2  A. Rajaei (CICMA), Hilbert Modular Forms Modulo l
   Imin Chen (CICMA), Explicit description of some jacobian relations
Jan. 7  **Imin Chen**, (CICMA), *Mini-course: Modular Forms and Modular Curves I*
Saar David Hersonsky, (Caltech), *Diophantine approximation and hyperbolic geometry*

Jan. 14  **Imin Chen**, (CICMA), *Mini-course: Modular Forms and Modular Curves III*
**Katia Consani**, (MIT), *Algebraic cycles and arithmetic on degenerations*

Jan. 21  **Andreas Schweizer**, (CICMA), *Mini-course: Automorphic Forms over Function Fields I*
**Jeff Achter**, (University of Massachusetts), *Hilbert-Siegel moduli spaces in positive characteristic*

Jan. 28  **Andreas Schweizer**, (CICMA), *Mini-course: Automorphic Forms over Function Fields III*
**Adrian Iovita**, (University of Washington), *The $p$-adic Abel-Jacobi map and $p$-adic $L$-functions of modular forms*

Feb. 4  **Adrian Iovita**, (University of Washington), *Mini-course: Topics in $p$-adic Galois Representations I*
**Neal Koblitz**, (University of Washington), *Description and Analysis of Joseph Silverman’s Attack on the Elliptic Curve Discrete Logarithm Problem*

Feb. 11  **Adrian Iovita**, (University of Washington), *Mini-course: Topics in $p$-adic Galois Representations III*
**Francesco Pappalardi**, (University of Rome III), *On binary Egyptian fractions*

Feb. 18  **Eyal Goren**, (CICMA), *Mini-course: Hilbert Modular Varieties I*
**Eyal Goren**, (CICMA), *Mini-course: Hilbert Modular Varieties II*

Mar. 4  **Andrew Granville**, (University of Georgia), *Mini-course: The spectrum of multiplicative values I*
**Bill Banks**, (University of Missouri), *Some expressions for the values of the Riemann zeta function at odd positive integers*

Mar. 11  **Daniel Lieman**, (University of Missouri), *Bounds on exponential sums and applications to cryptography*
**Alexandru Zaharescu**, (CICMA), *Trace on $C_p$, generating degrees and $p$-adic $L$-functions*

Mar. 18  **Jean-Francois Mestre**, (Université de Paris VII), *Mini-course: Polynomial Constructions, Galois Theory and Elliptic Curves I*
**Serge Lang**, (Yale University), *Spherical Transforms, (Harish-Chandra Inversion and the Heat Kernel)*
Mar. 25 Jean-Francois Mestre, (Université de Paris VII), Mini-course: Polynomial Constructions, Galois Theory and Elliptic Curves III
Jorge Morales, (Louisiana State University), On the Hasse-Witt invariant of the Killing form

Apr. 8 Johan de Jong, (MIT), Stratification by Newton Polygon
Eyal Goren, (CICMA), Cobordism and modular forms

Apr. 15 Abdellah Sebbar, (CICMA), Classification theorem for congruence groups
Torsten Wedhorn, (MIT), A generalization of Eichler-Shimura theory

Apr. 22 Masato Kuwata, (Université de Caen), Points on elliptic curves defined over cyclic cubic fields and generalized Kummer surfaces
Fiona Murnaghan, (University of Toronto), Mini-course: Representations of reductive $p$-adic groups II

Apr. 29 Fiona Murnaghan, (University of Toronto), Mini-course: Representations of reductive $p$-adic groups IV

May 13 Brett Tangedal, (College of Charleston), Computing with Stark’s Rank One Abelian Conjecture
David Hayes, (University of Massachusetts at Amherst), Aligning Brumer-Stark elements into a Hecke character

June 17 Yann Bugeaud, (Université de Strasbourg), Autour de l’équation diophantienne $(x^n - 1)/(x - 1) = y^q$
Fall 1998

Sept. 17  Massimo Bertolini, (Universita de Pavia), Mini-course: Iwasawa theory of modular forms I
          David Solomon, (King’s College), Stark’s Conjecture in terms of twisted Zeta-functions

Sept. 24 Massimo Bertolini, (Universita de Pavia), Mini-course: Iwasawa theory of modular forms III
          Werner Bley, (Augsburg University (RFA)), Elliptic curves and Galois module structure

Oct.  1 Alexandru Zaharescu, (CICMA), Mod $p$ reduction of algebraic varieties, discrepancies and short exponential sums
          Stephen Kudla, (University of Maryland), A peculiar modular form of weight 1

Oct.  8 Workshop on Algebraic modular forms and modular forms mod $p$

Oct. 15 Chris Skinner, (Institute for Advanced Study), Mini-course: Ordinary representations and modular forms I
          Chris Skinner, (Institute for Advanced Study), Mini-course: Ordinary representations and modular forms II

Oct. 22 Chris Skinner, (Institute for Advanced Study), Mini-course: Ordinary representations and modular forms IV
          Henri Darmon, (McGill University), $p$-adic uniformization and the Birch Swinnerton-Dyer conjecture

Nov.  5 Ram Murty, (Queens University), Survey of Sieve methods I
          C. S. Rajan, (Tata Institute), Mini-course: Rankin-Selberg $L$-functions I

Nov. 12 Ram Murty, (Queens University), Survey of Sieve methods III
          C. S. Rajan, (Tata Institute), Mini-course: Rankin-Selberg $L$-functions III

Nov. 19 Ram Murty, (Queens University), Survey of Sieve methods V
          Cornelius Greither, (Laval University), Galois - Cohen - Lenstra heuristics

Dec. 10 Xavier Roblot, (CICMA), Stark’s Conjectures and Hilbert’s Twelfth Problem
          Jonathan Sands, (University of Vermont), The Story of Base Change for the Brumer-Stark Conjecture
Winter 1998

Jan. 22 Wenzhi Luo, (Princeton University), *On the distribution of values of symmetric square $L$-functions at 1*

Niranjan Ramachandran, (University of Michigan), *Naive introduction to mixed Hodge structures and motives*

Jan. 29 Kamal Khuri-Makdisi, (Harvard University), *On the curves associated to certain rings of automorphic forms*

Francesco Sica, (McGill University), *Order of vanishing of $L$-functions at the center of the critical strip*

Feb. 5 Eyal Goren, (CICMA), *Hilbert modular varieties in positive characteristic*

Greg Anderson, (University of Minnesota), *Fermionic Fock space over a local ring*

Feb. 19 Georgios Pappas, (Princeton University), *Galois modules and $L$-functions*

Ernst-Ulrich Gekeler, (Universitat des Saarlandes), *On the cuspidal group of a Drinfeld modular curve*

Mar. 5 Dihua Jiang, (Yale University), *Nonvanishing of special values of automorphic $L$-functions*

Gerhard Niklasch, (Technische Universitat Munichen), *Unit equations*

Mar. 19 Tonghai Yang, (University of Michigan), *Special Values of $L$-functions at the center*

Serge Lang, (Yale University), *Twisting Eisenstein series with the heat kernel*

Mar. 26 David Goss, (Ohio State University), *Analytic continuation of integrals in characteristic $p$, I*

David Goss, (Ohio State University), *Analytic continuation of integrals in characteristic $p$, II*

Apr. 16 Chantal David, (Concordia University), *Galois representations with non-surjective traces*

Hershy Kisilevsky, (Concordia University), *Vanishing of twists of $L$-functions*

Apr. 30 Barry Mazur, (Harvard University), *$p$-adic interpolation of modular forms*

Abdellah Sebbar, (CICMA), *Weight 4 automorphic forms for some Fuchsian groups*
Sept. 11 **Imin Chen**, (McGill University), *Relations between jacobians of certain modular curves*

**Christian Popescu**, (University of Texas at Austin), *Stark-type conjectures* $\mathbb{Z}$

Sept. 25 **Hendrik Lenstra**, (University of California at Berkeley), *On the factorization of lacunary polynomials*

**Andrew Granville**, (University of Georgia), *Mean values of multiplicative functions: Decay and Superdecay*

Oct. 11 **Ravi Ramakrishna**, (Yale University), *Deforming an even Galois Representation*  
**Adrian Iovita**, (CICMA), *$p$-Adic Height Pairings for Abelian Varieties with Semistable Ordinary Reduction*

Oct. 16 **Amir Akbary**, (Concordia University), *Non-Vanishing of Modular L-Functions with Large Level*  
**Andreas Schweizer**, (CICMA), *On elliptic curves over function fields of characteristic 2*

Nov. 6 **Christopher Skinner**, (Institute for Advanced Study), *Ordinary modular forms and Galois representations*  
**Henri Darmon**, (McGill University), *Hyperelliptic curves, (Hilbert modular forms, and Fermat’s Last theorem)*

Nov. 20 **Nike Vatsal**, (University of Toronto), *Heegner points and hyperbolic periods*  
**Pietro Cornacchia**, (University of Pisa), *Ideal class groups of cyclotomic fields*

Dec. 4 **David Dummit**, (University of Vermont), *Report on some work of Anderson and Das - Algebraic products of Gamma function values*  
**Gaeten Haché**, (CICMA), *Effective Riemann-Roch Theorem*
**WINTER 1997**

**Jan. 16**  
Fred Diamond, (MIT), *Liberating deformations of Galois representations*  
R. Coleman, (University of California at Berkeley), *p-adic perturbations*

**Jan. 30**  
Sol Friedberg, (Boston College / University of California at Santa Cruz), *L-functions attached to metaplectic automorphic forms*  
Henri Darmon, (McGill University), *Stark-Heegner points over real quadratic fields*

**Feb. 13**  
David Cardon, (Queen’s University), *A Riemann Hypothesis for Metaplectic Whittaker Functions*  
Lloyd Simons, (Saint Michael’s College), *On Demuskin Formations for p=2*

**Feb. 27**  
Kamal Khuri-Makdisi, (Harvard University), *Representations of SL(2)xG when SL(2)xG is not quite a dual pair*  
Helena Verrill, (Queen’s University), *The L-series of a certain pencil of K3 surfaces*

**Mar. 20**  
Serge Lang, (Yale University), *Eigenfunction expansions of the Heat Kernel on Pos_n/GL_n(Z)*  
René Schoof, (Université di Roma Tor Vergata), *Wiles's criterion for complete intersections*

**Mar. 27**  
Richard Taylor, (Harvard University), *Modularity of some more elliptic curves*  
YuanLin Li, (Memorial University Newfoundland), *Generalized Unitary Units in Integral Group Rings*

**Apr. 10**  
Glenn Stevens, (Boston University), *p-Adic Modular Forms and Modular Curves*  
Glenn Stevens, (Boston University), *p-Adic Integration and Families of Modular Forms*

**Apr. 17**  
Hershy Kisilevsky, (Concordia University), *Vanishing of twists of L-values*  
Loic Merel, (University of California at Berkeley), *Even modular Galois representations?*

**Apr. 24**  
Ram Murty, (McGill University / Queen’s University), *The exponents of class groups of imaginary quadratic fields*  
Michael Rosen, (Brown University), *Elliptic Surfaces - Conjectures of Nagao and Tate*

**May 1**  
Eyal Goren, (Harvard University), *Special values of theta functions of genus 2*  
Andrew Odlyzko, (Minnesota) *The 10^{21}-st zero of the Riemann zeta function*

**June 18**  
Gautami Bhowmik, (Université de Valenciennes), *Zeta Function Associated to Subgroups of Finite Abelian Groups*  
Chantal David, (Concordia University), *Curves with surjective Galois representations*
Fall 1996

Sept. 12  **Lisa Fastenberg**, (CICMA), *Mordell-Weil groups in procyclic extensions*

**Yiannis Petridis**, (McGill University), *Special values of nonholomorphic Eisenstein series and Rankin-Selberg convolutions*

Sept. 26  **Massimo Bertolini**, (Università di Pavia), *$p$-adic uniformization and $p$-adic $L$-functions*

**Bernhard Kock**, (Universität Karlsruhe), *On Adams operations on locally free class groups*

Oct. 10  **Jean-Pierre Serre**, (Collège de France), *Equipartition of Frobenius angles*

**Doug Ulmer**, (University of Arizona), *$L$-series of automorphic forms over function fields*

Oct. 24  **Lindsay Childs**, (SUNY at Albany), *Taming wild extensions with Hopf algebras*

**Jurgens Klueners**, (Technical University (Berlin) and CICMA), *On Computing Subfields of Algebraic Number Fields*

Nov. 7  **Daniel Goldstein**, (University of Vermont), *Tamely ramified representations of $p$-adic groups*

**Ken-Ichiro Kimura**, (Queen’s University), *$K_2$ of a Fermat quotient and the value of its $L$-function*

Nov. 21  **Bjorn Poonen**, (Princeton University), *Explicit descent on Jacobians of cyclic covers of the projective line*

**Andreas Schweizwer**, (CICMA), *Strong Weil curves over $F_2(T)$*

Dec. 5  **Anna Rio**, (Universitat Politecnica de Catalunya), *Some questions regarding the modularity of octahedral Galois representations*

**Adrian Iovita**, (CICMA), *Good Reduction of Abelian Varieties and Fontaine’s Theory*

Dec. 19  **Ram Murty**, (McGill University / Queen’s University), *Autour de ABC*

**Omar Kihel**, (CICMA), *Pell’s equation and elliptic curves*
Jan. 25  Ram Murty, (McGill University), *Artin’s conjecture on primitive roots and elliptic analogues*
   David Hayes, (University of Massachusetts at Amherst), *Analytic continuation via Fourier analysis*

Feb. 8  **Nigel Boston**, (University of Illinois), *Some developments in Galois representations*
   **Nigel Boston**, (University of Illinois), *Dirichlet series attached to (pro)infinite groups*

Feb. 22  Cornelius Greither, (Université Laval), *Integral normal bases in tame abelian extensions of imaginary quadratic fields*
   Werner Lutkebohmert, (Ulm University / IAS), *The structure of proper p-adic groups*

Mar. 7  C.S. Rajan, (McGill University), *Density results for characters, strong multiplicity one, and non-normal cubic lift*
   Josep Gebel, (CICMA), *Computing integer points on elliptic curves over the rationals with applications to Mordell’s equation*

Mar. 21  Sergey Lang, (Yale University), *Zeta functions and Heat Kernels on Hilbert-Asai Modular varieties*
   Sergey Lang, (Yale University), *Recent work on the Shafarevich Conjecture for K3 Surfaces*

Mar. 29  Ravi Raghunathan, (Yale University), *A converse theorem for Dirichlet series with poles*
   Yuri Zarhin, (Pennsylvania State University), *p-adic abelian integrals and Neron pairings*

Apr. 4  Linghsueh Shu, (University of Vermont), *Periodic and non-periodic counting sequences*
   David Dummit, (University of Vermont), *Two remarks: on a theorem of Armitage-Frohlich and on embedding global torsion in local torsion*

Apr. 18  Karl Rubin, (Ohio State University), *Euler systems for p-adic representations I*
   Karl Rubin, (Ohio State University), *Euler systems for p-adic representations II*

May 2  Ken Kramer, (Queen’s College (CUNY)), *Bounding conductors of abelian varieties over local fields*
   Francesco Pappalardi, (University of Rome III), *On the existence of normal basis over finite fields related to the Gauss Sums*
Fall 1995

Sept. 7  Ram Murty, (McGill University), On the abc conjecture  
         David Dummit, (University of Vermont), Computing Stark units for totally real cubic fields

Sept. 21 Linghsueh Shu, (University of Vermont), Class numbers of cyclotomic extensions of function fields  
         Cornelius Greither, (Université Laval), On Chinburg’s second conjecture

Oct. 5  C.S. Rajan, (McGill University), On the size of the Shafarevich-Tate groups of elliptic curves over function fields  
         David Hayes, (University of Massachusetts at Amherst), How to use Stark’s conjecture to solve $a^2 + b^2 = p$

Oct. 19 Harold Stark, (University of California at San Diego), Path Zeta Functions of Graphs  
         Seon-In Kwon, (CICMA), Quaternion Covers of Elliptic Curves

Nov. 2  Hershy Kisilevsky, (Concordia University), Survey talk on Iwasawa theory  
         William Banks, (CICMA), The nonexistence of Siegel zeroes on GL (3)

Nov. 16 Barry Mazur, (Harvard University), Families of modular eigenforms  
         Guenther Frei, (Université Laval), On the development leading to Artin’s reciprocity law

Nov. 30 Jiu-Kang Yu, (Princeton University), The Cohen-Lenstra heuristic in the function field case  
         Li Guo, (Institute for Advanced Study), Special values of $L$-functions and Iwasawa theory

Dec. 14 Damien Roy, (University of Ottawa), Simultaneous approximation and algebraic independence  
         Ted Chinburg, (University of Pennsylvania), The inverse problem of Galois module structure theory
Winter 1995

Jan. 12  Ram Murty (McGill University)  The rank of $J_0(N)$
         Jorge Morales (Louisiana State University)  Gaussian periods mod $p$ and Vandiver’s conjecture

Jan. 26  Chantal David (Concordia University)  Average Frobenius Distributions of Elliptic Curves
         Hershy Kisilevsky (Concordia University)  Torsion in Abelian Galois Groups

Feb. 9   Jonathan Sands (University of Vermont)  An introduction to Stark’s conjectures
         Karl Rubin (Ohio State University)  A refined Stark conjecture for abelian $L$-functions with multiple zeroes

Feb. 23  Gisbert Wuestholz (ETH and IAS)  On Faltings’ Product Theorem
         Gisbert Wuestholz (ETH and IAS)  Logarithms and Integrals

Mar. 9   Serge Lang (Yale University)  Heat kernels and theta inversion
         Serge Lang (Yale University)  Gauss transforms and new zeta functions

Mar. 16  John H. Conway (Princeton University)  A remarkable integer sequence
         Ralph Greenberg (U. of Washington)  Kummer theory of abelian varieties

Mar. 30  Rene Schoof (Universita di Roma 2)  Abelian varieties over cyclotomic fields with good reduction everywhere
         Kumar Murty (U. of Toronto)  Weil Cycles

Apr. 6   J-F. Mestre (Universite de Paris 7),  Course
         Rene Schoof (Universita di Roma 2)  On Iwasawa invariants

Apr. 13  J-F. Mestre (Universite de Paris 7),  Course
         J-F. Mestre (Universite de Paris 7),  Course

Apr. 20  Kevin Coombes (U. of Maryland, College Park)
         Tamara Lefcourt (U. of Pennsylvania)

Apr. 27  J-F. Mestre (Universite de Paris 7),  Course
         J-F. Mestre (Universite de Paris 7),  Course

May 4    J-F. Mestre (Universite de Paris 7),  Course
         J-F. Mestre (Universite de Paris 7),  Course

May 11   J-F. Mestre (Universite de Paris 7),  Course
         J-F. Mestre (Universite de Paris 7),  Course

May 18   J-F. Mestre (Universite de Paris 7),  Course
         J-F. Mestre (Universite de Paris 7),  Course
Aug. 31 Joe Silverman (Brown University) Lehmer’s conjecture, exceptional units and small Salem numbers

Sept. 8 Helmut Koch (Berlin) Generalizations of Local Class Field Theory
    Farshid Hajir (Caltech) The Rank of Ideal Class Groups and the Fontaine-Mazur Conjecture

Oct. 20 David Hayes (U. Massachusetts at Amherst) Computing conductors of Jacobi Sum Hecke characters via Eisenstein
    Andrew Granville (University of Georgia) It’s as easy as abc

Oct. 27 Liem Mai (McGill University) On Root Numbers
    Songjie Ren (University of Vermont) The Hilbert analogue of Henri Cohen’s Eisenstein series

Nov. 3 David Harbater (University of Pennsylvania) Galois groups with prescribed ramification
    Dan Goldston (University of Toronto) A lower bound method for primes

Nov. 10 Bret Tangedal (University of Vermont) A question of Stark
    Conjeeveram S. Rajan (McGill University) The work of Kamienny and Merel

Nov. 17 Richard Taylor (Cambridge University), Modular forms and Elliptic curves (d’apres Wiles)
    Richard Taylor (Cambridge University), Rings of Hecke Operators

24 Nov. Jean-Pierre Serre (College de France), Trace forms
    Jean-Pierre Serre (College de France), Sous-groupes finis des groupes de Lie

25 Nov. Jean-Pierre Serre (College de France), Quelques problèmes sur les nombres premiers

Dec. 1 Massimo Bertolini (Universite de Pavia), More Heegner points on Mumford-Tate curves
    Fred Diamond (Cambridge University), More Rings of Hecke operators

Dec. 8 Seon-In Kwon (University of Pennsylvania) De Rham invariant on the minimal model of an elliptic curve
    Shreeram Abhyankar (Purdue University) Nice equations for nice groups

Dec. 9 Shreeram Abhyankar (Purdue University) Hilbert’s thirteenth problem
    Fernando Gouvea (Colby College) Fermat’s Last Theorem
WINTER 1994

Jan. 20 Marvin Knopp (Temple University) The Riemann-Hecke-Bochner Correspondence
Ram Murty (McGill University) Some Reflections on Selberg’s Conjectures
Marvin Knopp (Temple University) Hamburger’s Theorem

Jan. 27 Eric Liverance (Concordia University) $x^3 + y^3 = p$
Henri Darmon (Princeton) Report from Hong Kong

Feb. 10 Prof. Juerg Kramer (Universite Laval) A generalization of the Néron-Tate height

Mar. 3 M. Zaidenberg (University of Grenoble) Cyclic Algebraic Surfaces
R. Murty (McGill University) A reciprocity law for supersolvable Galois extensions

Mar. 10 Roland Gillard (Institut Fourier) Construction of Flach elements in symetric square
Roland Gillard (Institut Fourier) About Kolyvagin’s method

Mar. 17 Serge Lang (Yale University) Explicit Formulas & Theta-invariants
Serge Lang (Yale University) Jorgenson-Todorov’s discriminant for $K_3$ Surfaces

Mar. 31 Jorge Morales (Louisiana State University) Systems of Quadratic Forms

May 5 Yves Martin (CRM) Modular invariance of replicable functions
Ozlem Imamoglu (Dartmouth College) Theta functions and the Kabota map for the symplectic group
**QUEBEC-VERMONT NUMBER THEORY SEMINAR (1984-2010)**

**FALL 1993**

Sept. 23  **H. Kisilevsky** (Concordia) *Abelian Galois Groups of Finitely Generated Fields*

**Y. Martin** (Concordia U.) *On Multiplicative eta-quotients*

Oct. 7  **Volker Mueller** (University of Saarland) *Computing the number of points on elliptic curves over finite fields of characteristic greater than 3*

**David Dummit** (University of Vermont) *The Mordell-Weil groups of some CM elliptic curves*

**Jonathan Sands** (University of Vermont) *How to express a relative class number as a determinant*

Oct. 21  **Chantal David** (Concordia) *Average Lang-Trotter Conjecture for Drinfeld Modules*

**Francesco Pappalardi** (CRM)

Oct. 28  **Karl Rubin** (Ohio State University) *An overview of Wiles’ proof*

**Karl Rubin** (Ohio State University) *Selmer groups and deformations of Galois representations*

**Karl Rubin** (Ohio State University) *The solving of Fermat’s Last Theorem* (Public lecture)

Nov. 4  **Fernando Q. Gouvea** (Colby College) *Modular deformations of Galois representations*

**Kumar Murty** (University of Toronto) *Average values of L-functions*

**Henri Darmon** (Princeton University) *Courbes elliptiques et equations de Fermat generalisees*

**Jurg Kramer** (ETH, Zurich), *Le dernier Theoreme de Fermat* (conference populaire)

Nov. 11  **A. Buium** (I.A.S., Princeton) *The ABC Theorem for Abelian Varieties*

**S. Abdulali** (CICMA) *Algebraic Cycles on Abelian Varieties*

Nov. 18  **Jonathan Sands** (University of Vermont) *Imaginary quadratic fields with non-trivial lambda invariants*

**B. Mazur** (Harvard University) *Questions related to uniform bounds for numbers of rational points*

Dec. 2  **A. Geramita** (Queen’s University) *Zero-dimensional subschemes of projective n-space in the study of curves and surfaces*

**H. Kisilevsky** (Concordia University)

Dec. 9  **Enrico Bombieri** (I.A.S. Princeton) *Remarks on the analytic complexity of zeta functions*

**Enrico Bombieri** (I.A.S. Princeton) *New effective methods in diophantine approximation*
Jan. 7  **J. Conway**  (Princeton) *Understanding quadratic reciprocity without understanding squares or primes*
   **J. Conway**  (Princeton) *Classifying quadratic forms without understanding ANYTHING*

Jan. 21  **R. Murty**  (McGill University) *Some new results on supersingular primes*
   **S. Shokranian**  (U. of Toronto) *Cyclic Galois groups and local trace formula*

Jan. 28  **Glenn Stevens**  (Boston University) *Towards a Lambda-adic theory of automorphic forms*
   **Roland Martin**  (McGill University) *An application of quantum group theory to the classification problem for Igusa local zeta functions*

Feb. 4  **Manfred Kolster**  (McMaster University) *Etale K-theory and some classical conjectures in number theory*
   **Liem Mai**  (C.R.M.) *Value of L-Functions at the Critical Points*

Feb. 18  **Jan Nekovar**  (Berkeley) *p-adic cohomology and values of L-functions*
   **Juerg Kramer**  (ETH, Zurich) *The arithmetic theory of Siegel-Jacobi forms*

Mar. 11  **Serge Lang**  (Yale University) *Analytic Number & Spectral Theory I*
   **Serge Lang**  (Yale University) *Analytic Number & Spectral Theory II*

Mar. 25  **F. Pappallardi**  (McGill) *On a Conjecture of Zassenhaus on primes*
   **J. Borwein**  (Waterloo and Dalhousie) *A History of the computation of Pi*

Apr. 8  **Michel Emsalem**  (Paris VII) *Dessins d’enfant*
   **Michel Emsalem**  (Paris VII) *Deformations de revetements de P1*

Apr. 22  **R. Murty**  (McGill) *How big is sha?*
   **M. Kuwata**  (McGill) *On the rank of Quadratic twists of elliptic curves*

May 13  **H. Darmon**  (Princeton University) *Stickelberger elements and S-units*
   **D. Dummit**  (University of Vermont) *Computations on Some CM Elliptic Curves*
Fall 1992

Oct. 8 Pierre Cartier (Ecole Normale Superieur) Naming Real Algebraic Numbers
Masato Kuwata (McGill University) Rank of quadratic twists of elliptic curves

Oct. 29 V. Jha (Concordia University) Stickelberger’s Theorem & Applications
F. Gouvea (Colby College) P-adic modular forms of weight zero

Nov. 12 A.O.L. Atkin (University of Illinois at Chicago) Number of Points on Elliptic Curves
A.O.L. Atkin (University of Illinois at Chicago) Orthogonal Polynomials in $j$ and Supersingular Equations

Nov. 19 David Ginzburg (Ohio State University) An Introduction to the Langlands’ Analytic Conjectures
David Ginzburg (Ohio State University) On Some Symmetric $k$-th power $L$-functions for $GL(n)$

Dec. 3 Henri Darmon (Princeton) Descent on $P_1 \setminus \{0, 1, \infty\}$ and the generalized Fermat equation

Dec. 10 Yasuhiro Goto (Queen’s University) The Tate conjecture for certain weighted projective surfaces
Lloyd Simons (St. Michael’s College) The Galois-Invariant Structure of the Norm Residue Symbol for Tamely-Ramified Extensions of local fields
Winter 1992

Jan. 23  P. Ribenboim (Queen’s University), *Squares in Lucas Sequences*
         R. Murty (McGill), *Brun’s Sieve*

Feb. 13  M. Kuwata (McGill), *Elliptic Pencils on K3 Surfaces with Large Picard Number*
         D. Dummit (University of Vermont), *Computing the Drinfeld Module for Hyperelliptic Curves*

Mar. 5   B. Berndt (University of Illinois), *Ramanujan’s Notebooks I*
         B. Berndt (University of Illinois), *Ramanujan’s Notebooks II*

Mar. 12  M. Olivier (Universite de Bordeaux), *Enumerating Algebraic Number Fields and Computing their Galois Groups*
         F. Diaz y Diaz (Universite de Bordeaux), *Computing Class Numbers using the Subexponential Algorithm*

Mar. 19  S. Lang (Yale University), *The Heat Kernel and the Artin Formalism of L-Functions*
         S. Lang (Yale University), *Degeneracy of the Spectrum of the Laplace Operator and Jorgenson’s Proof of a Conjecture of Deligne*

Apr. 9   M.S. Raghunathan (Tata Institute), *The Congruence Subgroup Problem*
         R. Murty (McGill), *Euclidean Rings*

Apr. 23  E. Fouvry (Paris – Orsay), *Average Behaviour of Elliptic Curves*
         T. Stefanicki (McGill), *Zeros of L-functions of Automorphic Forms*

May 7    E. De Shalit (Princeton University), *Modular Curves and p-adic Period*
         R. Murty (McGill), *The Distribution of Super Singular Primes*

May 21  D. Rohrlich (Maryland), *Families of elliptic curves: rank of the family and rank of the fibers*
         M. Hindry (Paris VII), *Hauteurs locales et globales sur les varietes abeliennes*
Fall 1991

Aug. 15  **Y. Tschinkel** (MIT), *Impressions from Seattle Motives, L-Functions, etc.*
         **D. Ramakrishnan** (Caltech), *The Tate Conjecture for Quaternionic Shimura Surfaces*

Aug. 29 **M. Waldschmidt** (Institut Poincaré), *Logarithms of Algebraic Points on Algebraic Groups*

Sept. 5  **Y. Zarhin** (Moscow), *Tate Conjecture for Abelian Varieties Over Finite Fields with Certain Newton Polygons*
         **L. Mai** (CRM), *Average Ranks of Certain Elliptic Curves* (d’après Fouvry)

Sept. 19 **J. Im** (CRM), *Special Values of Symmetric Square L-Functions*
        **K. Murty** (University of Toronto), *Langland’s Recipe for r*

Sept. 26 **I. Connell** (McGill), *Good Reduction of Elliptic Curves in Abelian Extensions*
        **D. Dummit** (University of Vermont), *Hecke Characters of CM Elliptic Curves*

Oct. 10 **K. Murty** (University of Toronto), *Hodge Conjecture for Abelian Varieties*
        **D. Dorman** (Middlebury College), *What is the Analogue of Gross Zagier in Function Fields?*

Oct. 17 **D. Goss** (Ohio State University), *Arithmetics in Function Fields*
        **D. Prasad** (Tata Institute), *Restriction of an SO(n) Representation to SO(n – 1)*

Nov. 7  **K. Murty** (visiting McGill/CRM), *On the Hodge Conjectures*
        **D. Roy** (Concordia/McGill), *Simultaneous Approximation in Number Fields*

Nov. 21 **R. Murty** (McGill), *Estimating Eigenvalues of Hecke Operators* (after Duke & Iwaniec)
        **H. Kisilevsky** (Concordia), *Abelian Galois Groups over \( \mathbb{Q}(T) \)*

Dec. 17 **J. Oesterle** (Paris VI visiting Columbia), *On the Number of Solutions of Equations mod \( p^n \)*
        **J. Oesterle** (Paris VI visiting Columbia), *Elliptic Curves with Isomorphic p-torsion*
Winter 1991

Jan. 10  **F. Gouvea** (Queen’s University), *The Slope Decomposition of Spaces of Modular Forms*

**D. Dummit** (University of Vermont), *Conductors of CM Elliptic Curves*

Jan. 31  **K. Rubin** (Harvard), *Stark/Heegner points on Elliptic Curves with Complex Multiplication I*

**K. Rubin** (Harvard), *Stark/Heegner points on Elliptic Curves with Complex Multiplication II*

Feb. 21  **K. Murty** (University of Toronto), *Quaternionic Shimura Surfaces*

**K. Murty** (University of Toronto), *Non-vanishing Theorems for $L$-Functions*

Feb. 28  **F. Shahidi** (Purdue University), *Exterior Square $L$-Functions*

**R. Murty** (McGill), *Selberg’s Conjecture on $L$-Functions*

Mar. 7   **H. Zimmer** (Saarbruecken), *Torsion Groups of Elliptic Curves Over Fields of Small Degree*

**B. Singh** (Tata Institute), *Some Cases of Makai’s Conjecture*

Mar. 14  **S. Lang** (Yale University), *The Special Set of a Projective Variety*

**S. Lang** (Yale University), *The Error Term for Nevanlinna Theory in Coverings*

Apr. 4   **A. Selberg** (Princeton), *Old and New Conjectures about a class of Dirichlet Series*

**C. Stewart** (Waterloo), *Polynomial Congruences, Thue Equations, and the Rank of Elliptic Curves*

Apr. 18  **T. Zink** (University of Toronto), *$p$-adic Uniformization*

**M. Rosen** (Brown University), *Automorphisms of Function Fields*

Apr. 25  **D. Dummit** (University of Vermont), *On Rubin’s Special Units*

**R. Murty** (McGill), *Le Programme de Langlands*

May 9   **F. Destremps** (CRM), *A Generalization of a Theorem of Sen on Extensions of $p$-adic Fields*

**R. Murty** (McGill), *Converse Theory for GL(1)*
Fall 1990

Sept. 20  **R. Borcherds** (Cambridge University), *Moonshine and Modular Forms*

**J. Cremona** (Exeter University), *Modular Symbols and Computation of Elliptic Curves*

Oct. 4  **H. Koch** (E. Berlin), *Integral Positive Definite Unimodular Lattices*

**J. Labute** (McGill), *Lie Algebras and Central Series of Groups*

Oct. 11  **J. Cremona** (Exeter University), *Modular and Elliptic Curves over Imaginary Quadratic Fields*

**F. Destremps** (CRM), *Factorizability, Grothendieck Groups and Galois Module Structure*

Oct. 18  **A. Parshin** (Moscow), *Inequalities in Arithmetic Surfaces*

**H. Kisilevsky** (Concordia), *Independence in Function Fields*

Nov. 1  **H. Koch** (Berlin), *Local Definition of Local Galois $\epsilon$-Factors*

**N. Stephens** (Cardiff), *Integral Points on Elliptic Curves*

Nov. 8  **J.F. Mestre** (Paris VI), *Hyperelliptic Curves with Real Multiplications*

**J.F. Mestre** (Paris VI), *Regular extensions of $\mathbb{Q}(t)$ with Galois Group $\tilde{A}_n$*

Nov. 22  **A. Parshin** (Moscow), *Diophantine Algebraic Geometry*

**H. Darmon** (Harvard), *Refined Class Number Formulas for Derivatives of $L$-series*

Nov. 29  **F. Oort** (Princeton), *Newton Polygons Stratify Moduli Space*

**R. Greenberg** (Boston University), *Proof of the Mazur-Tate-Teitelbaum Conjecture*

Dec. 13  **F. Destremps** (CRM), *Sen’s Theorem Classifying $p$-adic Fields*

**J. Sands** (University of Vermont), *Semisimplicity of Iwasawa Modules*
Winter 1990

Jan. 11  M. Kuwata (Brown University), *Diophantine Problems on Elliptic Surfaces*
         H. Darmon (Harvard University), *Heegner points and a Theorem of Birch-Swinnerton-Dyer Type*

Jan. 18  F. Oort (Utrecht University), *Lifting Abelian Varieties from characteristic p*
         J. Top (Queens University)

Jan. 25  K. Rubin (Ohio State University), *The Main Conjectures I*
         K. Rubin (Ohio State University), *The Main Conjectures II*

Feb. 8   J. Sands, *Travaux de Kolyvagin à la Rubin II*
         R. Murty, *The Sato–Tate Conjecture I*

Feb. 15  R. Murty, *The Sato–Tate Conjecture II*
         F. Thaine, *Relations between Units and Jacobi Sums in Prime Cyclotomic Fields II*

Mar. 1   F. Gouvea (Harvard University), *The Square–Free Sieve and Ranks of Elliptic Curves*
         A. Silverberg (Ohio State University), *Adelic Representations and Canonical Models–A Variant of the Isogeny Theorem*

Mar. 15  E. Friedman (Penn. State), *Regulators of Number Fields*
         W. Tautz (Queens University), *Supersingular Abelian Varieties*

Mar. 22  L. Washington (University of Maryland), *Quartic Fields and Modular Curves*
         J. Sands, *Iwasawa Invariants over Imaginary Quadratic Fields*

Apr. 5   P. Garrett (University of Minnesota), *Arithmetic of Automorphic Forms and L–functions I*
         P. Garrett (University of Minnesota), *Arithmetic of Automorphic Forms and L–functions II*

Apr. 12  D. Dorman, *A Factorization Formula for Singular Moduli of Drinfeld Modules*
         D. Dorman, *Topics in Elliptic Curves*

Apr. 26  B. Mazur (Harvard University), *Uniform Bounds on Torsion on Elliptic Curves*
         G. Anderson (University of Minnesota), *Selberg Sums and Integrals*

June 28  D. Hayes (UMass. Amherst), *Stark’s Conjecture and Kolyvagin Euler Systems*
         H. Kisilevsky, *Semi-simplicity in \( \mathbb{Z}_p \)–extensions*
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Sept. 14  **R. Murty**, *Supersingular Primes*  
**J. Sands**, *Vanishing of the Iwasawa $\mu$-invariant*

Oct. 6  **J. Sands**, *Vanishing of the Iwasawa $\mu$-invariant II*  
**H. Kisilevsky**, *$p$-adic Limits of Class Numbers*

Oct. 19  **R. Gupta** (Univ. of British Columbia), *Genera of Elliptic Division Polynomials*  
**R. Murty**, *Recent work on the Density Hypothesis*

Nov. 2  **D. Dummit**, *Formal Groups attached to Elliptic Curves*  
**H. Williams** (University of Manitoba), *Shanks’ CUFFQI Algorithm*

Nov. 16  **F. Thaine**, *Relations between Units and Jacobi Sums in Prime Cyclotomic Fields*  
**J. Top** (Queens University), *Detecting Algebraic Cycles by Reducing Mod $p$*

Nov. 30  **N. Elkies** (Harvard University), *Elliptic Curves and Lattices I*  
**N. Elkies** (Harvard University), *Elliptic Curves and Lattices II*

Dec. 14  **J. Buchmann** (Saarbrucken), *Factorization Algorithms using Number Fields*  
**J. Sands**, *Travaux de Kolyvagin à la Rubin*
Jan. 19  **H. Kisilevsky**, *Travaux de Rubin et Kolyvagin II*
**J. Sands**, *Arithmetic of Non-Maximal Orders*

Jan. 26  **H. Kisilevsky**, *Travaux de Rubin et Kolyvagin III*
**J. Pila**, *Frobenius Maps and Abelian Varieties*

Feb. 9  **R. Murty**, *Average Values of L-series*
**D. Dummit**, *A Result of Hayes on Hecke Characters in Function Fields I*

Mar. 2   **S. Lang** (Yale University), *The abc Conjecture*
**D. Dummit**, *A Result of Hayes on Hecke Characters in Function Fields II*

Mar. 16 **R. Gupta**, *Dividing Rational Points on Elliptic Curves*
**F. Thaine** (Institute for Advanced Study), *The Orders of Ideal Class Groups in Prime Cyclotomic Fields*

Mar. 30 **H. Darmon** (Harvard University), *Galois Groups over $\mathbb{Q}(t)$*
**J. Minac** (Univ. of W. Ontario), *Witt Rings and Galois Groups*

Apr. 20 **D. Thakur**, *title to be announced*
Sept. 22  **R. Murty**, *Non-vanishing of L-series*
**Rajiv Gupta** (Univ. of British Columbia), *Division Fields of CM Elliptic Curves*

Oct. 6  **R. Murty**, *Modular Forms and the Splitting of Polynomials mod p*
**M. Emsalem** (Paris VII), *Travaux de Michel Laurent*

Oct. 20 **D. Dummit**, *Some Remarks on Imaginary Quadratic Fields*
**R. Murty**, *Kolyvagin’s Proof of the Finiteness of the Tate-Shafarevich Group*

Nov. 3  **K. Rubin** (Columbia Univ.), *Travaux de Kolyvagin I (Proof of the Main Conjectures)*
**K. Rubin** (Columbia Univ.), *Travaux de Kolyvagin II*

Nov. 10 **H. Stark** (M.I.T.), *p-adic Dirichlet Series*
**K. Murty** (Univ. of Toronto), *Kolyvagin’s Analytic Hypothesis*

Dec. 8  **H. Kisilevsky**, *Travaux de Rubin et Kolyvagin I*
**D. Hayes** (U. Mass Amherst), *Are Hecke Characters Implicit in the Brumer-Stark Conjecture?*
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Jan. 21  **G. Stevens** (Boston Univ.), *Kloosterman Sums and Poincare Series for GL(n), I*  
**G. Stevens** (Boston Univ.), *Kloosterman Sums and Poincare Series for GL(n), II*

Feb. 4  **D. Dummit**, *Arithmetic of Fermat Curves III - CM and periods*  
**R. Murty**, *Remarks on Elliptic Curves*

Feb. 18  **D. Dummit**, *Mestre’s Construction of Imaginary Quadratic Fields with non-trivial 5- and 7-ranks using Elliptic Curves*  
**J. Friedlander** (Univ. of Toronto), *Primes in Arithmetic Progressions*

Mar. 3  **K. Rubin** (Ohio State / Columbia), *The Main Conjecture for Imaginary Quadratic Fields I*  
**K. Rubin**, *The Main Conjecture for Imaginary Quadratic Fields II*

Mar. 17  **R. Greenberg** (Univ. of Washington), *Comments on Ramanujan’s $\tau$-function*  
**K. Murty** (Univ. of Toronto), *The Manin-Drinfeld Theorem and the Ramanujan $\tau$-function*

Mar. 24  **S. Lang** (Yale Univ.), *Open Questions in Classical Nevanlinna Theory*  
**D. Rohrlich** (Rutgers Univ.), *Non-vanishing of L-functions*  
**S. Lang**, *Higher Dimensional Nevanlinna Theory*

Mar. 31  **G. Prasad**, *Recent Work of Margulis on Davenport’s Conjecture*  
**D. Ford**, *The Number Theory Computation Software ALGEB*

Apr. 14  **L. Washington** (Univ. of Maryland), *Real Subfields of Cyclotomic Fields with Large Class Numbers*  
**J. Sonn** (Yale Univ.), *Realizing Double Covers of $S_n$, $A_n$ as Galois Groups over Number Field*

Apr. 28  **D. Dorman**, *Introduction to the Arithmetic of Drinfeld Modules*  
**J. Labute**, *Wingberg’s Characterization of Demuskin Groups*

May. 5  **A. Wiles** (Princeton Univ.), *Arithmetic of Totally Real Fields*  
**A. Wiles** (Princeton Univ.), *p-adic Representations for Totally Real Fields*

May. 12  **B. Gross** (Harvard Univ.), *Serre’s Conjectures on Modular Representations I*  
**B. Gross** (Harvard Univ.), *Serre’s Conjectures on Modular Representations II*

May. 19  **E. Gekeler** (I.A.S. / Max Planck Institute), *DeRham Cohomology for Drinfeld Modules*  
**K. Murty** (University of Toronto), *Zeros of Dirichlet L-functions*
July 7  J. Manin, *Points of Bounded Height on Abelian Varieties I*
      J. Manin, *Points of Bounded Height on Abelian Varieties II*

July 22 R. Odoni, *Weil Numbers and CM Fields*
      R. Murty, *Non-vanishing of Derivatives of L-functions*

July 30 W. Sinnott (Ohio State University), *Computing μ-invariants for Arbitrary CM Fields*
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Sept. 10  **R. Murty**, *Supersingular Elliptic Curves*  
          **S. Ramanan** (Tata Institute), *Embeddings of Abelian Surfaces*  

Sept. 24  **D. Dummit**, *The Arithmetic of Fermat Curves I*  
          **J. Sands**, *The Ferrero-Washington Trick*  

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          **H. Kisilevsky**, *Kida Formulas*  

Oct. 29  **R. Bedard** (Univ. of Ottawa), *Hecke Algebras*  
          **G. Anderson** (Univ. of MN / Institute for Advanced Study), *$p$-torsion in level $l^n$ Fermat Jacobians*  

Nov. 12  **R. Casselman** (Univ. of British Columbia), *Kottwitz’s Theorem on Tamagawa Numbers I*  
          **R. Casselman**, *Kottwitz’s Theorem on Tamagawa Numbers II*  

Dec. 3   **R. Murty**, *Primality Testing and Elliptic Pseudoprimes*  
          **R. Foote**, *Non-monomial Characters and the Artin Conjecture*
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            **H. Kisilevsky**, *Selmer Groups*

Feb. 19  **R. Foote**, *Lusztig-Deligne Representations of Finite Chevalley Groups*  
            **D. Dummit**, *Principal Homogeneous Spaces*

Feb. 26  **D. Dummit**, *Selmer Groups*

Mar. 5   **H. Kisilevsky**, *Selmer Groups*

Mar. 12  **J. Sands**, *The p-adic Artin Conjecture*  
            **U. Jannsen** (MSRI), *L-adic Cohomology of Abelian Varieties and Galois Cohomology of Algebraic Number Fields*

Apr. 2   **S. Lang** (Yale Univ.), *Vojta’s Conjecture*  
            **S. Lang** (Yale Univ.), *New Insights into Fermat’s Last Theorem*

Apr. 9   **G. van der Geer** (I.A.S.), *The Arithmetic of Hilbert Modular Surfaces*  
            **G. van der Geer** (I.A.S.), *The Geometry of Hilbert Modular Surfaces*

May 14  **D. Dummit**, *The Tate Transfer*  
            **M. Rosen** (Brown Univ.), *Some Relations between Mathematical Invariants*

July 21  **R. Greenberg** (Univ. of Wash./MSRI), *Ranks of Elliptic Curves in Z_p-extensions I*  
            **R. Greenberg** (Univ. of Wash./MSRI), *Ranks of Elliptic Curves in Z_p-extensions II*

July 23  **R. Greenberg** (Univ. of Wash./MSRI), *Iwasawa Modules and p-adic L-functions I*  
            **R. Greenberg** (Univ. of Wash./MSRI), *Iwasawa Modules and p-adic L-functions II*

Aug. 20  **G. Stevens** (Boston Univ.), *A cohomological approach to congruences between modular forms I*  
            **G. Stevens** (Boston Univ.), *A cohomological approach to congruences between modular forms II*
Fall 1986

Sept. 11  H. Kisilevsky, $\mathbb{Z}_p$–Extensions of Function Fields
          R. Murty, The Phragmen-Lindelof Theorem and Applications

Sept. 25 R. Murty, The Phragmen-Lindelof Theorem and Applications II
          J. Sands, Iwasawa’s Approach to Leopoldt’s Conjecture

Oct. 9   H. Kisilevsky, $\mathbb{Z}_p$–Extensions of Function Fields II
          R. Murty, Stark’s Method for Lower Bounds for Discriminants

          A. Odlyzko (Bell Labs), New Analytic Algorithms in Number Theory

Nov. 6   D. Dummit, On Results of Thaine and of Greenberg
          R. Foote, Spherical Functions

Nov. 21  K. Rubin (Ohio State / MSRI), CM Elliptic Curves and the Shafarevich-Tate Conjecture

Dec. 4   H. Iwaniec (Rutgers Univ.), Fourier Coefficients of Modular Forms of Half Integral Weight
          D. Dorman, Elkies’ Proof of the Infinitude of Supersingular Primes for Elliptic Curves over $\mathbb{Q}$

Dec. 15  D. Dummit, Greenberg’s Partial Converse to Coates and Wiles II
          J. Sands, Leopoldt’s Conjecture in Families of Fields
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   **S. Natarajan**, *Lower Bounds for the Coefficients of Ramanujan’s \( \tau \)-function*

Sept. 19  **C. Pomerance**, *Counting Finite Groups*

Sept. 26  **R. Murty**, *Integer Points on Curves of Genus 1*

   **J. Teitelbaum** (Harvard Univ.), *\( p \)-adic \( L \)-functions and Periods of Mumford-Schottky Curves*

Oct. 10  **R. Murty**, *Recent Progress on Artin’s Conjecture*

   **J. Labute**, *The Nilpotent Completion of the Fundamental Group of Smooth Complex Affine Varieties*

Oct. 24  **D. Dummit**, *The Brumer-Stark Conjecture (cont.)*

   **R. Murty**, *Some Remarks on an Improvement in the Chebotarov Density Theorem*

Nov. 1   **M. Waldschmidt** (Institute for Advanced Study), *Large Transcendence Degrees*

Nov. 7   **H. Kisilevsky**, *The Cohen-Lenstra Heuristic*

   **R. Yager** (Oklahoma State), *Tate Constants for Elliptic Curves*

Nov. 21  **R. Murty**, *Improvements in the Chebotarov Density Theorem*

   **W. Sinnott** (Ohio State Univ.), *On a Theorem of Washington*

Dec. 6   **J.P. Serre** (College de France / Harvard Univ.), *Topics on \( L \)-adic Representations*

   **J.P. Serre** (College de France / Harvard Univ.), *Weil + \( \epsilon \), Implies Fermat*
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Oct. 4  H. Kisilevsky, *Some Remarks on Friedman’s Theorem in Iwasawa Theory*
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Oct. 8  D. Goss (Ohio State), *Arithmetic of Function Fields I*
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Oct. 11 D. Goss, *Arithmetic of Function Fields III*
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Oct. 25 K. Murty \( \tau(n) = a \), has finitely many solutions for odd a
D. Dummit, *Modular Symbols and the \( p \)-adic \( L \)-function of an Elliptic Curve*

Nov. 8  L. Simons, *Hecke Operators on \( \Gamma_0(N) \) -the Atkin-Lehner Theory*
J. Tunnell (Rutgers Univ.), *Hilbert Modular Forms of Weight 1*

Nov. 15 R. Foote, *Hecke Algebras*
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Nov. 29 R. Foote, *Hecke Algebras and the Langlands Theory*
K. Murty, *Outline of Ribet’s Converse of the Kummer Criterion*

Dec. 13 D. Dummit, *Serre’s mod \( p \) modular forms*
D. Dummit, *\( p \)-adic Modular Forms and Construction of the Kubota-Leopoldt \( L \)-series*