Canadian Number Theory Association

CNTA XIII

June 16-20, 2014

Carleton University, Ottawa, Canada

Conference Schedule

SCHEDULE OF TALKS

Monday June 16, 2014

SA=Southam Hall, Carleton University
LA=Loeb Building, Carleton University

8:00	*Registration*	**Foyer of SA Theatre B**
9:00-9:30	*Welcoming Remarks* **Dr. Kimberly Matheson** *Vice President (Research)*	**SA Theatre B**
9:30-10:20	**Caterina Consani** *The arithmetic site*	**SA Theatre B**
10:20-10:50	*Coffee Break*	
10:50-11:40	**Andrew Sutherland** *The refined Sato-Tate conjecture*	**SA Theatre B**
11:45-12:00	**Andrew Bremner** *Points at rational distance from the vertices of geometric objects*	**SA Theatre B**
	Christelle Vincent *Weierstrass points on Drinfeld modular curves*	**LA C264**
	Amir Akbary *A log-free zero-density estimate for L-functions*	**LA C164**
	Andrew Fiori *Formulas for local densities of lattices over p-adic rings*	**SA 402**
12:00-1:30	*Lunch Break*	

1:30-2:00	**Karl Dilcher**	**SA Theatre B**
	The polynomials of Mahler and roots of unity	
	Gaël Rémond	**LA C264**
	Siegel fields	

2:10-2:40	**Jeff Achter**	**SA Theatre B**
	Local heuristics and exact formulas for abelian varieties over finite fields	
	Yu-Ru Liu	**LA C264**
	Equidistribution of polynomial sequences in function fields	

2:50-3:20	**Michael Rubenstein**	**SA Theatre B**
	Moments of zeta functions associated to hyperelliptic curves	
	Michel Laurent	**LA C264**
	Diophantine approximation by primitive points	

| 3:20-3:45 | *Coffee Break* | |

3:45-4:00	**Carmen Bruni**	**SA Theatre B**
	Twisted extensions of Fermat's last theorem	
	Adam Morgan	**LA C264**
	Parity of two Selmer ranks of hyperelliptic curves over quadratic extensions	
	Chester Weatherby	**LA C164**
	A generalization of Euler's theorem for $\zeta(2k)$	
	Siegfred Baluyot	**SA 402**
	On the zeros of Riemann's zeta-function on the critical line	

4:05-4:20	**Sam Chow**	**SA Theatre B**
	Waring's problem with shifts	
	Filip Najman	**LA C264**
	The number of twists with large torsion of an elliptic curve	
	Sandro Bettin	**LA C164**
	The twisted second moment of Dirichlet's L-function and the Estermann function	
	Larry Ericksen	**SA 402**
	Number Arrays: Congruence Residues, Periodicities, Coverings, and Take-Away Games	
4:25-4:40	**Michael Coons**	**SA Theatre B**
	Growth and gaps in regular sequences	
	Colin Weir	**LA C264**
	Computing the p-torsion of Jacobians in characteristic p	
	Goldwyn Millar	**LA C164**
	Small index Gauss sums	
4:45-5:00	**M. E. Charkani**	**SA Theatre B**
	On the discriminant and integral basis of a composite extension of degree 2p	
	Michael Knapp	**LA C264**
	2-Adic zeros of additive forms	
	Meng Fai Lim	**LA C164**
	Comparing the Selmer group of an ordinary p-adic representation and the Selmer group of the Tate dual of the representation	
	Hicham Saber	**SA 402**
	Vector-valued automorphic forms and vector bundles	
5:05-5:35	**Kumar Murty**	**SA Theatre B**
	Automorphy and the Sato-Tate conjecture	

Tuesday June 17, 2014

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8:30	*Registration*	**Foyer of SA Theatre B**
9:30-10:20	**Shaun Cooper**	**SA Theatre B**
	Hypergeometric functions, modular forms and series for $1/\pi$	
10:20-10:50	*Coffee Break*	
10:50-11:40	**Kathrin Bringmann**	**SA Theatre B**
	Decompositions of meromorphic Jacobi forms	
11:45-12:00	**Paul Voutier**	**SA Theatre B**
	Lang's conjecture and sharp height estimates for elliptic curves	
	Luca Candelori	**LA C264**
	Metaplectic stacks and vector-valued modular forms	
	Peter Jachyun Cho	**LA C164**
	n-level densities of Artin L-functions	
	Claudio Qureshi	**SA 402**
	Redei actions on finite fields	
12:00-1:30	*Lunch Break*	
1:30-2:00	**Alfred Weiss**	**SA Theatre B**
	What is equivariant Iwasawa theory?	
	Rachel Pries	**LA C264**
	Superspecial rank of abelian varieties and Jacobians	

2:10-2:40	**David Roe**	**SA Theatre B**
	Geometrizing the Langlands correspondence in mixed characteristic	
	Florian Luca	**LA C264**
	Diophantine equations with generalized Fibonacci numbers	
2:50-3:20	**Chung Pang Mok**	**SA Theatre B**
	Speculations on the future possibilities of the Langlands program	
	Michael Filaseta	**LA C264**
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3:20-3:45	*Coffee Break*	
3:45-4:00	**Kevin Hare**	**SA Theatre B**
	Three series for the generalized golden mean	
	Thomas A. Hulse	**LA C264**
	The sign of Fourier coefficients of more general half-integral weight cusp forms	
	Tristan Freiberg	**LA C164**
	Limit points of the sequence of normalized prime gaps	
	Patrick Allen	**SA 402**
	Deformations of Hilbert modular Galois representations	
4:05-4:20	**Jing-Jing Huang**	**SA Theatre B**
	Hausdorff theory for dual Diophantine approximation on curves	
	Natalia Garcia-Fritz	**LA C264**
	Hilbert's 10th Problem for one variable non-Archimedean entire functions	
	Alia Hamieh	**LA C164**
	Special values of anticyclotomic L-functions modulo λ	
	Scott M. Dunn	**SA 402**
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4:25-4:40	**Wentang Kuo**	**SA Theatre B**
	On Erdös-Pomerance conjecture	
	Allysa Lumley	**LA C264**
	New bounds for $\psi(x;q,a)$	
	Farzad Aryan	**LA C164**
	On distribution of k-tuples	
	of reduced residues	
7:30-8:30	*Welcoming Remarks*	**SA Theatre B**
	Dr. Roseann O'Reilly Runte	
	President, Carleton University	
	Public Lecture	
	Jean-Marie de Koninck	
	The Secret Life of Mathematics	
	La vie secrète des mathèmatiques	

Wednesday June 18, 2014

Buses will depart from Carleton University
at 8:45am for the University of Ottawa.

MRT=Morisset Hall, University of Ottawa

9:30-10:20	**Jacob Tsimerman**	**MRT 218**
	Recovering elliptic curves	
	from their p-torsion	
10:20-10:50	*Coffee Break*	
10:50-11:40	**James Arthur**	**MRT 218**
	On Langland's automorphic Galois	
	group and Weil's explicit formulas	
11:45-12:30	**Ribenboim Prize Lecture**	**MRT 218**
	Florian Herzig	
	On the mod p Langlands program	
12:30-	*Free Afternoon*	

Thursday June 19, 2014

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9:30-10:20	**Brian Conrey**	**SA Theatre B**
	Moments of the Riemann zeta function	
10:20-10:50	*Coffee Break*	
10:50-11:40	**Henri Darmon**	**SA Theatre B**
	Elliptic curves and class field theory	
11:45-12:00	**Jonas Jankauskas**	**SA Theatre B**
	On Littlewood polynomials with prescribed number of zeros inside the unit disk	
	Roderigo Martins	**LA C264**
	On the behaviour of polynomials and random mappings over finite fields	
	Nathan McNew	**LA C164**
	Some unconventional results in multiplicative number theory	
	Graeme Turner	**SA 402**
	The conductor and discriminant of bicyclic quartic fields	
12:00-1:30	*Lunch Break*	
1:30-2:00	**Claus Sorensen**	**SA Theatre B**
	The Breuil-Schneider conjecture	
	Alina Cojocaru	**LA C264**
	Frobenius fields for elliptic curves	

2:10-2:40	**David Roberts**	**SA Theatre B**
	A two-parameter division polynomial	
	with Galois group $U3(3) : 2 = G2(2)$	
	Leo Goldmakher	**LA C264**
	Bounds on the least	
	quadratic nonresidue	
2:50-3:20	**Renate Scheidler**	**SA Theatre B**
	Explicit one-dimensional infrastructure	
	in function fields of arbitrary degree	
3:20-3:45	*Coffee Break*	
3:45-4:00	**Olcay Karaatli**	**SA Theatre B**
	Generalized Fibonacci and Lucas	
	numbers of the form $5x^2$	
	Tim Trudgian	**LA C264**
	Linear sums of primitive roots	
	Damaris Schindler	**LA C164**
	A variant of Weyl's inequality for systems	
	of foms and applications	
	Adam Felix	**SA 402**
	Averages over families	
	of elliptic curves	
4:05-4:20	**Amilcar Pacheco**	**SA Theatre B**
	Bounds for the number of rational	
	points on curves over function fields	
	Kevin Henriot	**LA C264**
	On linear patterns of complexity	
	one in the primes	
	Anders Södergren	**LA C164**
	Low-lying zeros of elliptic	
	curve L-functions	
	Yavuz Kesicioglu	**SA 402**
	Representations by certain octonary quadratic	
	forms whose coefficients are 1, 2, 3 and 6	

4:25-4:40	**Fabien Pazuki**	**SA Theatre B**
	Bounds for the number of points	
	on curves over global fields	
	Akshaa Vatwani	**LA C264**
	An elliptic analogue of	
	a theorem of Hecke	
	Hector Pasten	**LA C164**
	Remarks on the shape of elliptic curves	
4:45-5:00	**Julian Rosen**	**SA Theatre B**
	Multiple zeta values and	
	their finite analogs	
	Dong Sung Yoon	**LA C264**
	Construction of class fields over	
	imaginary biquadratic fields	
	Ayla R. Gafni	**LA C164**
	Longest run of equal parts in	
	a random integer composition	
	Jaykov Foukzon	**SA 402**
	Non-archimedean analysis on the	
	extended hyperreal line $^*R_d$ and	
	some transcendence conjectures	
	over field Q	

Friday June 20, 2014

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9:30-10:20	**Nicholas Templier**	**SA Theatre B**
	Families of L-functions and their symmetry	
10:20-10:50	*Coffee Break*	
10:50-11:40	**James Maynard**	**SA Theatre B**
	Small gaps between primes	
11:45-12:00	**J C Saunders**	**SA Theatre B**
	Sums of digits in q-ary expansions	
	Taylor Dupuy	**LA C264**
	Lifts of the Frobenius	
	Greg Doyle	**LA C164**
	Quadratic form Gauss sums	
12:05-12:20	**Gokhan Soydan**	**SA Theatre B**
	On the solutions of the Diophantine equation $x^2 + 2^a p^b = y^4$	
	Sary Drappeau	**LA C264**
	The dispersion method in the context of friable numbers	
	Weidong Gao	**LA C164**
	Additive bases of finite abelian groups	
12:20-1:50	*Lunch Break*	
1:50-2:20	**Bruce C. Berndt**	**SA Theatre B**
	Partition identities inspired by Ramanujan	
	Michel Waldschmidt	**LA C264**
	A family of Thue equations involving powers of units of the simplest cubic fields	

2:30-3:00	**Mark Bauer**	**SA Theatre B**
	Cubic irrationalities and	
	a Ramanujan-Nagell analogue	
	Dimitris Koukoulopoulos	**LA C264**
	The frequency of elliptic curve	
	groups over finite fields	
3:10-3:40	**Carl Pomerance**	**SA Theatre B**
	The range of various familiar functions	
3:40-3:55	*Coffee Break*	
3:55-4:10	**Damien Roy**	**SA Theatre B**
	On Schmidt and Summerer	
	parametric geometry of numbers	
	James Parks	**LA C264**
	Amicable pairs and aliquot	
	cycles on average	
	Zafer Selcuk Aygin	**LA C164**
	Fourier series of a new	
	class of eta quotients	
4:15-4:30	**Daniel Fiorilli**	**SA Theatre B**
	A conditional determination of the	
	average rank of elliptic curves	
	László Szalay	**LA C264**
	Balancing with binomial coefficients	
	of certain types	
	Colin Hayman	**LA C164**
	An explicit formula for a	
	class of cubic Gauss sums	