CANT 2018 Program

Tuesday, May 22, 2018
CUNY Graduate Center, Room C198

8:15 - 9:00 a.m.	**Coffee and muffins in Room C198**
9:00 - 9:30 a.m.	**Andrey Rukhin**, NSWCDD. Dept. Of Navy "Alternative proofs of Steiner's 1-cycle theorem"
9:35 - 10:05 a.m.	**Maximilian Wötzel**, Universitat Politècnica de Catalunya, Spain "Set systems with distinct sumsets"
10:10 - 10:40 a.m.	**Wenbo Sun**, Ohio State University "Solution counting problem and quantitative recurrence theorem"
10:45 - 11:15 a.m.	**Trevor Hyde**, University of Michigan "Polynomial factorization statistics and point configurations in $\mathbf{R}^3$"
11:20 - 11:50 a.m.	**Cosmin Pohoata**, California Institute of Technology "Higher energies in additive combinatorics and discrete geometry"
11:55 - 12:25 p.m.	**David Ross**, University of Hawaii "Non-archimedean extensions of $\mathbf{R}$ and diophantine equations connected to Egyptian fractions"
12:30 - 2:00 p.m.	Lunch
2:00 - 2:50 p.m.	**Joel Moreira**, Northwestern University "A solution to the Erdős sumset conjecture"
3:00 - 3:30 p.m.	**Gabriel Conant**, University of Notre Dame "VC-dimension in groups"
3:35 - 4:05 p.m.	**Caroline Amelia Terry**, University of Maryland "A stable arithmetic regularity lemma in finite abelian groups"
4:10 - 4:40 p.m.	**Kevin Kwan**, Columbia University, and **Steven J. Miller**, Williams College "Near-perfect, within-perfect, and order-a-abundant numbers"
4:45 - 5:15 p.m.	**Problem session**, led by Steven J. Miller
5:30 - 6:30 p.m.	**Wine and cheese reception** in the Math Lounge, Room 4214

CANT 2018 Program

Wednesday, May 23, 2018
CUNY Graduate Center, Room C198

8:15 - 9:00 a.m.	**Coffee and muffins in Room C198**
9:00 - 9:30 a.m.	**Sukumar Das Adhikari**, Harish-Chandra Research Institute, and Ramakrishna Mission Vivekananda Educational and Research Institute, India "Some early Ramsey-type theorems in combinatorial number theory and some generalizations"
9:35 - 10:05 a.m.	**Ayla Gafni**, University of Rochester "Additive energy and the metric Poissonian property"
10:10 - 10:40 a.m.	**Arseniy Sheydvasser**, Yale University "Rigidity in the Ulam sequence"
10:45 - 11:15 a.m.	**Péter Pál Pach**, "On multiplicative Sidon sets"
11:20 - 11:50 a.m.	**Leonid Fel**, Technion - Israel Institute of Technology "Numerical semigroups generated by squares, cubes, and quartics of three consecutive integers"
11:55 - 12:25 p.m.	**Mauro Di Nasso**, University of Pisa, Italy "A generalized notion of asymptotic density"
12:30 - 2:00 p.m.	Lunch
2:00 - 2:50 p.m.	**Joel Moreira**, Northwestern University "A solution to the Erdős sumset conjecture"
3:00 - 3:30 p.m.	**Shabnam Akhtari**, University of Oregon "Representation of integers by binary forms"
3:35 - 4:05 p.m.	**Yuri Tschinkel**, Courant Institute, New York University "Arithmetic of del Pezzo surfaces"
4:10 - 4:40 p.m.	**Robert Hough**, SUNY Stony Brook "The local limit theorem on nilpotent Lie groups"
4:45 - 5:15 p.m.	**Margaret Bilu**, New York University "Motivic Euler products"
5:30 - 6:30 p.m.	**Pizza party** in the Math Lounge, Room 4214

CANT 2018 Program

Thursday, May 24, 2018
CUNY Graduate Center, Science Center, Room 4102

8:30 - 9:00 a.m.	**Coffee and muffins in Room 4102**
9:00 - 9:30 a.m.	**Paul Baginski**, Fairfield University
	"Nonunique factorization in the ring of integer-valued polynomials"
9:35 - 10:05 a.m.	**Gautami Bhowmik**, University of Lille, France
	"Asymptotics of Goldbach functions and zeros of L–functions"
10:10 - 10:40 a.m.	**Christoph Spiegel**, Universitat Politécnica de Catalunya, Spain
	"Going beyond 2.4 in Freiman's 2.4-Theorem"
10:45 - 11:15 a.m.	**Scott Chapman**, Sam Houston State University
	"On the catenary degree of elements in a numerical monoid
	generated by an arithmetic sequence"
11:20 - 11:50 a.m.	**Ram Krishna Pandey**, Indian Institute of Technology Roorkee, India
	"Direct and inverse theorems on the general h-fold sumsets
	and on the sums of dilated sets"
11:55 - 12:25 p.m.	**Steven Leth**, University of Northern Colorado
	"Some questions and results about SIM sets"
12:30 - 2:00 p.m.	Lunch
2:00 - 2:50 p.m.	**Joel Moreira**, Northwestern University
	"A solution to the Erdős sumset conjecture"
3:00 - 3:30 p.m.	**Lola Thompson**, Oberlin College
	"Divisor-sum fibers"
3:35 - 4:05 p.m.	**Huixi Li**, Clemson University
	"On Lemoine's conjecture and a theorem by Estermann"
4:10 - 4:40 p.m.	**Daniel Glasscock**, Northeastern University
	"Combinatorial cubes and solutions to linear equations in Piatetski-Shapiro sets"
4:45 - 5:15 p.m.	**Kevin O'Bryant**, College of Staten Island (CUNY)
	"Explicit bounds for primes in arithmetic progressions"
5:30 - 6:30 p.m.	**Wine and cheese reception** in the Math Lounge, Room 4214

CANT 2018 Program

Friday, May 25, 2018
CUNY Graduate Center
Parallel sessions in Rooms 4102 and 5417

8:30 - 9:00 a.m.   **Coffee and muffins in Room 4102**

9:00 - 9:30 a.m.
Room 4102   **Angel Kumchev**, Towson State University
"A hybrid of two theorems of Piatetski-Shapiro"

Room 5417::   **John R. Schmitt**, Middlebury College
"Distinct partial sums in cyclic groups"

9:35 - 10:05 a.m.
Room 4102   **Jared Duker Lichtman**, Dartmouth College
"Explicit estimates for the distribution of numbers
free of large prime factors"

Room 5417::   **Eric Rowland**, Hofstra University
"Enumeration of binomial coefficients by their p-adic valuations"

10:10 - 10:40 a.m.
Room 4102   **Alex Rice**, Millsaps College
"Extending the best known bounds for the Furstenberg-Sárközy theorem"

Room 5417::   **Nathan McNew**, Towson University
"Counting primitive subsets of $\{1, 2, ...n\}$"

10:45 - 11:15 a.m.
Room 4102   **Henry Towsner**, University of Pennsylvania
"Generalizing VC dimension to higher arity"

Room 5417:   **Carrie Finch-Smith**, Washington and Lee University
"Iterated Riesel and Sierpiński numbers"

11:20 - 11:50 a.m.
Room 4102   **Azita Mayeli**, Queensborough CC and CUNY Graduate Center
"Existence of no Gabor orthogonal bases on smooth and symmetric convex sets"

Room 5417::   **Satyanand Singh**, New York City Tech (CUNY)
"A Refinement of the Calkin Wilf Tree with some of its Implications"

CANT 2018 Program

Friday, May 25, 2018
Parallel sessions in Rooms 4102 and 5417

12:00 - 1:30 p.m. Lunch

1:30 - 2:00 p.m.
Room 4102 **Steven Senger**, Missouri State University
"Rainbow point configurations"

Room 5417: **Robert Donley**, Queensborough Community College (CUNY)
Title: Central zeros of Clebsch-Gordan Coefficients

2:05 - 2:35 p.m.
Room 4102 **Yuneid Puig de Dios**, University of California, Riverside
"Recurrence sets of linear operators with high piecewise syndeticity level"

Room 5417 **Diego Marques**, Universidade de Brasília, Brazil
"On some problems proposed by Kurt Mahler"

2:40 - 3:10 p.m.
Room 4102 **Brad Isaacson**, New York City Tech (CUNY)
"On some elementary character sums"

Room 5417 **Ariane Masuda**, New York City Tech (CUNY)
"Permutation polynomials over $\mathbf{F}_{q^2}$ from rational functions"

3:15 - 3:45 p.m.
Room 4102 **Katie McKeon**, Rutgers University
"Low-lying fundamental geodesics in an arithmetic hyperbolic 3-manifold"

Room 5417: **Mizan R. Khan**, Eastern Connecticut State University
"Hensley's Theorem on clean lattice tetrahedra with interior lattice points"

3:50 - 4:20 p.m.
Room 4102 **John H. Johnson**, Ohio State University
"Upper Banach density along filters"

Room 5417: **Jeshu Dastidar**, Queens College (CUNY)
"On the maximal number of roots of a trinomial over a prime field"

4:25 - 5:00 p.m.
Room 4102 **Problem session**, led by Kevin O'Bryant

5:00 p.m. **Wine and cheese reception** in the Math Lounge, Room 4214