

# CANT 2010 Program

Wednesday, May 26, 2010  
CUNY Graduate Center, Room 6417

- 8:30 - 9:15 a.m. Registration and coffee
- 9:15 - 9:55 a.m. **Aviezri Fraenkel**, Weizmann Institute of Science, Israel  
“Complementary sets of integers”
- 10:05 - 10:35 a.m. **Rishi Nath**, York College (CUNY)  
“Welter’s game and Young diagrams: A new interpretation involving hooks”
- 10:45 - 11:15 a.m. **Lan Nguyen**, University of Michigan  
“Functional equations for quantum integers”
- 11:25 - 11:55 a.m. **Sinan Gunturk**, Courant Institute, NYU  
“Additive number theory and quantization of signals”
- 12:00 - 12:30 p.m. **Urban Larsson**, Chalmers University of Technology  
and University of Gothenburg, Sweden  
“Invariant and dual subtraction games resolving the Duchêne-Rigo conjecture”
- 12:30 - 1:30 p.m. **Lunch and math movie**
- 1:30 - 2:10 p.m. **Kent Boklan**, Queens College (CUNY)  
“Every even except 22, 50, 114, 186, 212, 238, 364, 420, 428 and 454  
and every odd congruent to 0, 1, 2, 7, 8 (mod 9) is the sum of seven cubes”
- 2:20 - 3:00 p.m. **John Friedlander**, University of Toronto  
“Close relatives of the primes”
- 3:10 - 3:40 p.m. **Jonathan Sondow**, New York  
“Algebraic and transcendental solutions of some exponential equations”
- 3:50 - 4:30 p.m. **Peter Hegarty**, Chalmers University of Technology  
and University of Gothenburg, Sweden  
“Some new connections between additive number theory and graph theory”
- 4:30 - 5:00 p.m. **Problem session 1**
- 5:00 - 6:30 p.m. **Wine and cheese reception**  
in the mathematics common room on the fourth floor

# CANT 2010 Program

**Thursday, May 27, 2010**  
**CUNY Graduate Center, Room 6417**

- 8:30 - 9:00 a.m. Registration and coffee
- 9:00 - 9:40 a.m. **Alex Iosevich**, University of Rochester  
“Sharpness of Falconer’s estimate, geometric incidence theorems,  
and distribution of lattice points in convex domains, I”
- 9:50 - 10:20 a.m. **Steven Senger**, University of Missouri  
“Sharpness of Falconer’s estimate, geometric incidence theorems,  
and distribution of lattice points in convex domains, II”
- 10:30 - 11:10 a.m. **Neil Lyall**, University of Georgia  
“Simultaneous optimal polynomial recurrence”
- 11:20 - 11:50 a.m. **Brian Cook**, University of British Columbia  
“Constellations in  $P^d$ ”
- 12:00 - 12:30 p.m. **David Covert**, University of Missouri  
“A Furstenberg-Katznelson-Weiss type theorem on  $(d + 1)$ -point configurations in  $\mathbb{F}_q$ ”
- 12:30 - 1:30 p.m. **Lunch and math movie**
- 1:40 - 2:10 p.m. **John Griesmer**, University of British Columbia  
“Sumsets with one dense summand”
- 2:20 - 2:50 p.m. **Scott Chapman**, Sam Houston State University  
“Erdős-Zaks all divisor sets”
- 3:00 - 3:40 p.m. **John Steinberger**, Institute for Theoretical Computer Science,  
Tsinghua University, Beijing  
“Coset arrays and nonnegative integer linear combinations”
- 3:50 - 4:20 p.m. **Kevin O’Bryant**, College of Staten Island (CUNY)  
“Sets of integers without solutions to systems of equations”
- 4:30 - 5:00 p.m. **Problem session 2**
- 6:30 p.m. **Conference dinner**

# CANT 2010 Program

**Friday, May 28, 2010**  
**CUNY Graduate Center, Room 6417**

- 8:30 - 9:00 a.m. Registration and coffee
- 9:00 - 9:40 a.m. **Renling Jin**, College of Charleston  
“Every compact plane set with the square property contains an integral diagonal pair”
- 9:50 - 10:20 a.m. **Željka Ljujić**, CUNY Graduate Center  
“Periodicity of complementing multisets”
- 10:30 - 11:00 a.m. **Alex Kontorovich**, IAS and Brown  
“Progress on affine sieves”
- 11:10 - 11:50 p.m. **Mei-Chu Chang**, University of California-Riverside  
“Incomplete character sums over finite fields”
- 12:00 - 12:30 p.m. **William J. Keith**, Drexel University  
“Partitions with prescribed hooksets”
- 12:30 - 1:30 p.m. **Lunch and math movie**
- 1:30 - 2:10 p.m. **Jaewoo Lee**, Borough of Manhattan Community College (CUNY)  
“Algebraic proof for the geometric structure of sumsets”
- 2:20 - 2:50 p.m. **Hannah Alpert**, University of Chicago  
“Finite phase transitions in countable abelian groups”
- 3:00 - 3:30 p.m. **Alex Rice**, University of Georgia  
“Polynomial difference in the primes”
- 3:40 - 4:10 p.m. **Melvyn B. Nathanson**, Lehman College (CUNY)  
“Indecomposable systems and a theorem of de Bruijn in additive number theory”
- 4:10 - 4:40 p.m. **Problem session 3**
- 5:00 - 8:00 p.m. **Museum of Modern Art**

# CANT 2010 Program

**Saturday, May 29, 2010**  
**CUNY Graduate Center, Room 6417**

- 10:00 - 10:10 a.m. Registration and coffee
- 10:10 - 10:40 a.m. **Steven J. Miller**, Williams College  
“Cookie Monster meets the Fibonacci numbers.  
Mmmmmm – theorems!”
- 10:50 - 11:20 a.m. **Charles Helou**, Pennsylvania State University - Brandywine  
“Supremum of representation functions”
- 11:30 - 12:00 a.m. **Paul Baginski**, Université Claude Bernard Lyon, France  
“Lengths of factorizations in numerical semigroup rings”
- 12:00 - 1:00 p.m. **Lunch and math movie**
- 1:00 - 1:30 p.m. **Brandt Kronholm**, SUNY at Albany  
“Generalized Ramanujan congruence properties  
of the restricted partition function  $p(n, m)$ ”
- 1:45 - 3:00 p.m. **Problem session 4**
- 5:11 - 5:58 p.m. **NJ Transit** train from Penn Station to Short Hills
- 6:00 p.m. **Conference barbecue and party**