CANT 2021 Program

Monday, May 24, 2021

8:00 - 8:25 a.m.	**Sean Prendiville**, University of Lancaster, UK Extremal Sidon sets are Fourier uniform, with arithmetic applications
8:30 - 8:55 a.m.	**Péter Pál Pach**, TU Budapest, Hungary Sum-full sets are not zero-sum-free
9:00 - 9:25 a.m.	**Peter Bradshaw**, University of Bristol, UK Energy bounds for k-fold sums in very convex sets
9:30 - 9:55 a.m	**Sergei Konyagin**, Steklov Mathematical Institute, Moscow, Russia Gaps between totients
10:00 - 10:30 a.m.	**Break**
10:30 - 10:55 a.m.	**Mel Nathanson**, Lehman College (CUNY) Sidon systems for linear forms and the Bose-Chowla argument
11:00 - 11:25 a.m.	**Misha Rudnev**, University of Bristol, UK On distinct values of bilinear forms, cross-ratios, etc.
11:30 - 11:55 a.m.	**Sophie Stevens**, Johan Radon Institute (RICAM), Austria On sumsets of convex functions
12:00 - 12:25 p.m.	**Zoltán Füredi**, University of Illinois at Urbana-Champaign An upper bound on the size of Sidon sets
12:30 - 1:00 p.m.	**Break**
1:00 - 1:25 p.m.	**Aled Walker**, Trinity College Cambridge, UK Effective results on the size and structure of sumsets
1:30 - 1:55 p.m.	**Mikhail Gabdullin**, Steklov Mathematical Institute, Russia Sets whose differences avoid squares modulo m

CANT 2021 Program

Monday, May 24, 2021

2:00 - 2:25 p.m.	**Oleksiy Klurman**, University of Bristol, UK On the "variants" of the Erdős discrepancy problem
2:30 - 2:55 a.m	**Trevor Dion Wooley**, Purdue University Rudin, polynomials, and nested efficient congruencing
3:00 - 3:25 p.m.	**Break**
3:30 - 3:55 p.m.	**Wolfgang Schmid**, LAGA, University of Paris 8, France Sequences of sets over finite abelian groups and weighted zero-sum sequences
4:00 - 4:25 p.m.	**Noah Kravitz**, Princeton University Inverse problems for minimal complements
4:30 - 4:55 p.m.	**Robert Hough**, SUNY at Stony Brook Subconvexity of the Shintani zeta functions
5:00 - 5:25 p.m.	**Jeffrey Lagarias**, University of Michigan Partial factorizations of a generalized product of binomial coefficients
5:30 - 6:00 p.m.	**Break**
6:00 - 6:25 p.m.	**Steve Senger**, Missouri State University Upper and lower bounds on chains determined by angles
6:30 - 6:55 p.m.	**Kåre Schou Gjaldbæk**, CUNY Classification of quadratic packing polynomials on sectors of $\mathbb{R}^2$
7:00 - 7:25 p.m.	**Catherine Yan**, Texas A & M University Vector parking functions with rational boundary
7:30 - 7:55 p.m.	**Tim Trudgian**, UNSW Canberra at ADFA Twenty-four carats of Goldbach oscillations

CANT 2021 Zoom Program

Tuesday, May 25, 2021

8:00 - 8:25 a.m.	**Audie Warren**, Johan Radon (RICAM), Austria Additive and multiplicative Sidon sets
8:30 - 8:55 a.m.	**Artūras Dubickas**, Vilnius University, Lithuania On polynomial Sidon sequences
9:00 - 9:25 a.m.	**Jörg Brüdern**, Universität Göttingen, Germany Expander estimates for cubes
9:30 - 9:55 a.m	**Imre Z. Ruzsa**, Alfréd Rényi Institute of Mathematics, Hungary Additive decomposition of square-free numbers
10:00 - 10:30 a.m.	**Break**
10:30 - 10:55 a.m.	**I. D. Shkredov**, Steklov Mathematical Institute, Russia On an application of higher energies to Sidon sets
11:00 - 11:25 a.m.	**George Shakan**, University of Oxford, UK A large gap in a dilate of a set
11:30 - 11:55 a.m.	**Anne de Roton**, Université de Lorraine, France Critical sets with small sumset in $\mathbb{R}$
12:00 - 12:25 p.m.	**Yuri Tschinkel**, New York University Arithmetic properties of equivariant birational types
12:30 - 1:00 p.m.	**Break**
1:00 - 1:25 p.m.	**Aliaksei Semchankau**, Steklov Mathematical Institute, Russia A new bound for $A(A+A)$ for large sets
1:30 - 1:55 p.m.	**Michael Curran**, University of Oxford, UK Sumset structure, size, and Ehrhart theory

CANT 2021 Zoom Program

Tuesday, May 25, 2021

2:00 - 2:25 p.m. **James Wheeler**, University of Bristol, UK
Incidence theorems for modular hyperbolae in positive characteristic

2:30 - 2:55 p.m **Lan Nguyen**, University of Wisconsin - Parkside
On the existence of bi-Lipschitz equivalences and quasi-isometries between arithmetic

3:00 - 3:30 p.m. **Break**

3:30 - 3:55 p.m. **Robert Vaughan**, Pennsylvania State University
On generating functions in additive number theory

4:00 - 4:25 p.m. **Souktik Roy**, University of Illinois at Urbana-Champaign
Generalized sums and products

4:30 - 4:55 p.m. **Jianping Pan**, University of California, Davis
Tableaux and polynomial expansions

5:00 - 5:25 p.m. **Daniel G. Glasscock**, University of Massachusetts, Lowell
Sums and intersections of multiplicatively invariant sets in the integers

5:30 - 6:00 p.m. **Break**

6:00 - 6:25 p.m. **James Sellers**, University of Minnesota Duluth
Sequentially congruent partitions and partitions into squares

6:30 - 6:55 p.m. **Robert Dougherty-Bliss**, Rutgers University - New Brunswick
More irrationally good approximations from Beukers integrals

7:00 - 7:25 p.m. **Russell Jay Hendel**, Towson University
Sums of squares: Methods for proving identity families

7:30 - 7:55 p.m. **Robert Donley**, Queensborough Community College (CUNY)
Vandermonde convolution for ranked posets

8:00 - 8:25 p.m. **Olivine Silier**, California Institute of Technology
Structural Szemerédi-Trotter theorem for lattices

CANT 2021 Zoom Program

Wednesday, May 26, 2021

7:30 - 7:55 a.m.	**Bhuwanesh Rao Patil**, IIT Roorkee, India Multiplicative patterns in syndetic sets
8:00 - 8:25 a.m.	**Sean Eberhard**, University of Cambridge, UK The apparent structure of dense Sidon sets
8:30 - 8:55 a.m.	**Carlo Sanna**, Politecnico di Torino, Italy Additive bases and Niven numbers
9:00 - 9:25 a.m.	**Oliver Roche-Newton**, Johann Radon Institute (RICAM), Austria The Elekes-Szabo Theorem and sum-product estimates for sparse graphs
9:30 - 9:55 a.m	**Harald Andres Helfgott**, Universität Göttingen, Germany Expansion, divisibility and parity
10:00 - 10:30 a.m.	**Emmanuel Kowalski**, ETH Zürich, Switzerland Some families of Sidon sets arising in algebraic geometry
10:30 - 10:55 a.m.	**Pooja Punyani**, Indian Institute of Technology, New Delhi, India. On characterizing small changes in the Frobenius number
11:00 - 11:25 a.m.	**Leonid Fel**, Technion - Israel Institute of Technology, Israel Genera of numerical semigroups and polynomial identities for degrees of syzygies
11:30 - 11:55 a.m.	**Sándor Kiss**, Budapest University of Technology and Economics, Hungary Generalized Sidon sets of perfect powers
12:00 - 12:25 p.m.	**Neil Hindman**, Howard University Strongly image partition regular matrices
12:30 - 1:00 p.m.	**Break**
1:00 - 1:25 p.m.	**Lajos Hajdu**, University of Debrecen, Hungary Multiplicative (in)decomposability of polynomial sequences
1:30 - 1:55 p.m.	**Zachary Chase**, University of Oxford, UK A random analogue of Gilbreath's conjecture

CANT 2021 Zoom Program

Wednesday, May 26, 2021

2:00 - 2:25 p.m. **Konstantin Olmezov**, Moscow Institute of Physics and Technology, Russia
On additive energy of convex sets with higher concavity

2:30 - 2:55 p.m **Paul Pollack**, University of Georgia
Multiplicative orders mod p

3:00 - 3:25 p.m. **Break**

3:30 - 3:55 p.m. **Alex Rice**, Millsaps College
Two constructions related to well-known distance problems

4:00 - 4:25 p.m. **Sinai Robins**, University of Sao Paolo, Brazil
The null set of a of a polytope, and the Pompeiu property for polytopes

4:30 - 4:55 p.m. **Richard Magner**, Boston University
Classifying partition regular polynomials in a nonlinear family

5:00 - 5:25 p.m. **Elżbieta Bołdyriew, John Haviland, Phúc Lâm, John Lentfer, Steven J. Miller, Fernando Trejos Suárez**, Williams College
Completeness of generalized Fibonacci sequences

5:30 - 6:00 p.m. **Break**

6:00 - 6:25 p.m. **Geertrui Van de Voorde**, University of Canterbury, New Zealand
On the product of elements with prescribed trace

6:30 - 6:55 p.m. **Arthur Paul Pedersen**, City College (CUNY)
The Hahn-Hölder theorem

7:00 - 7:25 p.m. **Brian McDonald**, University of Rochester
Cycles of arbitrary length in distance graphs on $\mathbb{F}_q^d$

7:30 - 7:55 p.m. **Noah Lebowitz-Lockard**,
On factorizations into distinct parts

8:00 - 8:25 p.m. **Ognian Trifonov**, University of South Carolina
Extreme covering systems of the integers

CANT 2021 Zoom Program

Thursday, May 27, 2021

7:30 - 7:55 a.m.	**Javier Pliego**, University of Bristol, UK Uniform bounds in Waring's problem over diagonal forms
8:00 - 8:25 a.m.	**Jinhui Fang**, Nanjing University of Information Science and Technology, China On generalized perfect difference sumset
8:30 - 8:55 a.m.	**Norbert Hegyvári**, Eötvös University and Rényi Institute, Hungary Communication complexity, coding, and combinatorial number theory
9:00 - 9:25 a.m.	**Qinghai Zhong**, Universität Graz, Austria On product-one sequences over subsets of groups
9:30 - 9:55 a.m	**Oriol Serra**, Universitat Politècnica de Catalunya, Barcelona Triangulations and the Brunn–Minkowski inequality
10:00 - 10:30 a.m.	**Break**
10:30 - 10:55 a.m.	**Yifan Jing**, University of Illinois at Urbana-Champaign Minimal and nearly minimal measure expansions in connected locally compact grou
11:00 - 11:25 a.m.	**Scott Chapman**, Sam Houston State University When Is a Puiseux monoid atomic?
11:30 - 11:55 a.m.	**Paul Baginski**, Fairfield University Abundant numbers, semigroup ideals, and nonunique factorization
12:00 - 12:25 p.m.	**Jozsef Balogh**, University of Illinois at Urbana-Champaign On the lower bound on Folkman cube
12:30 - 1:00 p.m.	**Break**
1:00 - 1:25 p.m.	**Fatma Karaoglu**, Tekirdag Namik Kemal University, Turkey On the number of lines of a smooth cubic surface
1:30 - 1:55 p.m.	**Mehdi Makhul**, Johann Radon Institute (RICAM), Austria The Elekes-Szabó problem and the uniformity conjecture

CANT 2021 Zoom Program

Thursday, May 27, 2021

2:00 - 2:25 p.m.	**Christian Elsholtz**, Graz University of Technology, Austria Fermat's Last Theorem implies Euclid's infinitude of primes
2:30 - 2:55 p.m	**David Grynkiewicz**, University of Memphis Characterizing infinite subsets of lattice points having finite-like behavior
3:00 - 3:25 p.m.	**Break**
3:30 - 3:55 p.m.	**Thái Hoàng Lê**, University of Mississippi Bohr sets in sumsets
4:00 - 4:25 p.m.	**Karyn McLellan** , Mount Saint Vincent University, Canada A problem on generating sets containing Fibonacci numbers
4:30 - 4:55 p.m.	**Max Wenqiang Xu**, Stanford University Discrepancy in modular arithmetic progressions
5:00 - 5:25 p.m.	**Anqi Li**, MIT Local properties of difference sets
5:30 - 6:00 p.m.	**Break**
6:00 - 6:25 p.m.	**Ryan Ronan**, Baruch College (CUNY) An asymptotic for the growth of Markoff-Hurwitz tuples
6:30 - 6:55 p.m.	**Esther Banaian**, University of Minnesota A generalization of Markov numbers
7:00 - 7:25 p.m.	**Gabriela Araujo-Pardo**, Universidad Nacional Autónoma de México, México Complete colorings on circulant graphs and digraphs
7:30 - 7:55 p.m.	**Kaylee Weatherspoon**, University of South Carolina A description of edge-maximal separable unit distance graphs in the plane

CANT 2021 Zoom Program

Friday, May 28, 2021

8:00 - 8:25 a.m.	**Paolo Leonetti**, Università Bocconi, Milano, Italy On Poissonian pair correlation sequences with few gaps
8:30 - 8:55 a.m.	**Emma Bailey**, University of Bristol, UK Generalized moments and large deviations of random matrix polynomials and L-functions
9:00 - 9:25 a.m.	**Louis-Pierre Arguin**, Baruch College (CUNY) The Fyodorov-Hiary-Keating conjecture
9:30 - 9:55 a.m	**Shalom Eliahou**, Université du Littoral Côte d'Opale, France Optimal bounds on the growth of iterated sumsets in abelian semigroups
10:00 - 10:25 a.m.	**Karameh Muneer**, Palestine Polytechnic University, Palestine Generalizations of B. Berggren and Price matrices
10:30 - 10:55 a.m.	**Valérie Berthé**, Université de Paris, CNRS, France Dynamics of Ostrowski's numeration: Limit laws and Hausdorff dimensions
11:00 - 11:25 a.m.	**Tom Slattery**, University of Warwick, UK On Fibonacci partitions
11:30 - 11:55 a.m.	**Ayesha Hussain**, University of Bristol, UK Distributions of Dirichlet character sums
12:00 - 12:25 p.m.	**George Andrews**, Pennsylvania State University Schmidt Type partitions and modular forms
12:30 - 1:00 p.m.	**Break**
1:00 - 1:25 p.m.	**Maciej Ulas**, Jagiellonian University, Krakow, Poland Equal values of certain partition functions via Diophantine equations
1:30 - 1:55 p.m.	**Akshat Mudgal**, University of Bristol, UK Additive energies on spheres

CANT 2021 Zoom Program

Friday, May 28, 2021

2:00 - 2:25 p.m. **Krystian Gajdzica**, Jagiellonian University, Krakow, Poland
Arithmetic properties of the restricted partition function $p_{\mathcal{A}}(n,k)$

2:30 - 2:55 p.m **Alex Iosevich**, University of Rochester
Uniform distribution and incidence theorems

3:00 - 3:25 p.m. **Break**

3:30 - 3:55 p.m. **Joshua Cooper**, University of South Carolina
Recurrence ranks and moment sequences

4:00 - 4:25 p.m. **Danielle Cox**, Mount Saint Vincent University, Canada
A sequence arising from diffusion in graphs

4:30 - 4:55 p.m. **Mizan R. Khan**, Eastern Connecticut State University
To count clean triangles we count on *imph*

5:00 - 5:25 p.m. **Amanda Francis**, Mathematical Reviews, AMS
Sequences of integers related to resistance distance in structured graphs

5:30 - 6:00 p.m. **Break**

6:00 - 6:25 p.m. **Shane Chern**, Pennsylvania State University
Euclidean billiard partitions

6:30 - 6:55 p.m. **Chi Hoi Yip**, University of British Columbia, Canada
Gauss sums and the maximum cliques in generalized Paley graphs of square order

7:00 - 7:25 p.m. **Brad Isaacson**, New York City College of Technology (CUNY)
Three imprimitive character sums

7:30 - 7:55 p.m. **Yaghoub Rahimi**, Georgia Institute of Technology
Endpoint ℓ^p improving estimates for prime averages