

CANT 2025

Twenty-third Annual Workshop on
Combinatorial and Additive Number Theory
CUNY Graduate Center
May 20 - 23, 2025

Speakers (as of April 28)

- (1) **Carlo Francisco E. Adajar**, University of Georgia
Email: paco@uga.edu
Title: On the distribution of $v_p(\sigma(n))$
- (2) **Samuel Allen Alexander**, U.S. Securities and Exchange Commission
Title: Hindman's theorem and the hyperreals
Email: samuelallenalexander@gmail.com
- (3) **Daniel Baczkowski**, University of Findlay
Email: baczkowski@findlay.edu
Title: Diophantine equations involving arithmetic functions and factorials
- (4) **Paul Baginski**, Fairfield University
Email: baginski@gmail.com
Title: The plus-minus Davenport constant of some finite abelian groups
- (5) **Gautami Bhowmik**, Université Lille, France
Email: gautami.bhowmik@univ-lille.fr
Title: On the Telhcirid problem
- (6) **Jonathan Chapman**, University of Warwick, UK
Email: Jonathan.Chapman@warwick.ac.uk
Title: Counting commuting integer matrices
- (7) **Scott Chapman**, Sam Houston State University
Email: stc008@shsu.edu
Title: Betti elements and non-unique factorizations
- (8) **Shashi Chourasiya**, University of New South Wales, Australia
Email: s.chourasiya@unsw.edu.au
Title: Power-free palindromes and reversed primes
- (9) **Hopper Clark**, Bates College
Email: hclark2@bates.edu
Title : Patterns among Ulam words

- (10) **Taylor Daniels**, Purdue University
Email: daniel84@purdue.edu
Title: Vanishing Legendre-17-signed partition numbers
- (11) **Anne de Roton**, Université de Lorraine, Institut Elie Cartan, France
Email: anne.de-roton@univ-lorraine.fr
Title: Iterated sums races
- (12) **Aritram Dhar**, University of Florida
Email: aritramdhar@ufl.edu
Title: A bijective proof of an identity of Berkovich and Uncu
- (13) **Robert Donley**, Queens Community College (CUNY)
Email: rdonley@qcc.cuny.edu
Title: A classification for 1-factorizations of small order
- (14) **Dennis Eichhorn**, University of California Irvine
Email: deichhor@uci.edu
Title: Open problems involving cranks for partition congruences
- (15) **Jinhui Fang**,
Email: fangjinhui1114@163.com
Title: On bounded unique representation bases
- (16) **Daniel Benjamin Flores**, Purdue University
Email: flore205@purdue.edu
Title: K -multimagic squares and magic squares of k th powers via the circle method
- (17) **Jonathan Fraser**, St. Andrews University, UK
Email: jmf32@st-andrews.ac.uk
Title: Averages of the Fourier transform in finite fields
- (18) **Pedro A. Garcia Sánchez**, Universidad de Granada, Spain
Email: pedro@ugr.es
Title: Some problems related to the ideal class monoid of a numerical semi-group
- (19) **Val Gladkova**, University of Cambridge
Email: vg338@cam.ac.uk
Title: A lower bound for the strong arithmetic regularity lemma
- (20) **N. Hegyvári**, Eötvös University and Rényi Institute, Budapest
Email: hegyvari.norbert@renyi.hu
Title: Variants of Raimis theorem

- (21) **Brian Hopkins**, Saint Peter's University
Email: bhopkins@saintpeters.edu
Title: Scaled Arndt compositions
- (22) **Robert Hough**, Stony Brook University
Email: robert.hough@stonybrook.edu
Title: Lower order terms in the shape of cubic fields
- (23) **Sophie Huczynska**, University of St. Andrews, UK
Email: sh70@st-andrews.ac.uk
Title: Additive triples in groups of odd prime order
- (24) **Alex Iosevich**, University of Rochester
Email: iosevich@gmail.com
Title: The Fourier uncertainty principle, signal recovery, and applications
- (25) **Ryan Jeong**, Stanford University, and **Steve Miller**, Williams College
Email: rsjeong@stanford.edu; sjm1@williams.edu
Title: Phase transitions for binomial sets under linear forms
- (26) **Thomas Karam**, University of Oxford, UK
Email: Thomas.Karam@maths.ox.ac.uk
Title: After the cap-set problem, and some properties of the slice rank
- (27) **William Keith**, Michigan Technical University
Email: wjkeith@mtu.edu
Title: $s \pmod t$ -cores
- (28) **Gergo Kiss**, Budapest Corvinus University and Rényi Institute, Hungary
Email: kigergo57@gmail.com
Title: Weak tiling and the Coven-Meyerowitz conjecture from an analytic point of view
- (29) **Sandor Kiss**, Budapest University of Technology and Economics, Hungary
Email: ksandor@math.bme.hu
Title: Generalized Stanley sequences
- (30) **Yoshiharu Kohayakawa**, University of Sao Paulo, Brazil
Email: yoshi@ime.usp.br
Title: Arithmetic progressions in subset sums of sparse random sets of integers
- (31) **Emmanuel Kowalski**, ETH Zürich, Switzerland
Email: kowalski@ethz.ch
Title: Some pseudorandom graphs

- (32) **Vjekoslav Kovač**, University of Zagreb, Croatia
Email: vjekovac@math.hr
Title: Several irrationality problems for Ahmes series
- (33) **Noah Lebowitz-Lockard**
Email: nlebowi@gmail.com
Title: Partitions and ordered products
- (34) **Paolo Leonetti**, Università degli Studi dell'Insubria, Italy
Email: leonettipaolo@gmail.com
Title: On the completeness induced by densities on natural numbers
- (35) **Mehdi Makhul**, Universität Wien, Austria
Email: mmakhul@risc.jku.at
Title: Web geometry and the orchard problem
- (36) **Debyani Manna**, Indian Institute of Technology Roorkee, India
Email: d_manna@ma.iitr.ac.in, debyani97@gmail.com
Title: Some results on the extended inverse problem of $A + 2 \cdot A$
- (37) **Jeff Mozzochi**
Email: cjm@ix.netcom.com
Title: The closest known attempted proof of the twin prime conjecture
- (38) **Rishi Nath**, York College (CUNY)
Email: rnath@york.cuny.edu
Title: Simultaneous (co)core partitions
- (39) **Mel Nathanson**, Lehman College (CUNY)
Email: melvyn.nathanson@lehman.cuny.edu
Title: Sizes of sumsets of finite sets of integers
- (40) **Vladyslav Oles**, University of Idaho
Email: vladyslav.oles@gmail.com
Title: Vanishing symmetric functions
- (41) **Firdavs Rakhmonov**, University of St. Andrews, UK
Email: fr52@st-andrews.ac.uk
Title: Exceptional projections in finite fields: Fourier analytic bounds and incidence geometry
- (42) **Asher Roberts**, St. Joseph's University New York
Email: aroberts@sjny.edu
Title: Large deviations of Selberg's central limit theorem on RH

- (43) **David Ross**, University of Hawaii
Email: ross@math.hawaii.edu
Title: Upper density and a theorem of Banach
- (44) **Akash Singha Roy**, University of Georgia
Email: akash01s.roy@gmail.com
Title: Joint distribution in residue classes of families of multiplicative functions
- (45) **Cihan Sabuncu**, Université de Montréal, Canada
Email: cihan.sabuncu@umontreal.ca
Title: Extreme values of $r_3(n)$ in arithmetic progressions
Email: cihan.sabuncu@umontreal.ca
- (46) **Vincent Schinina**, CUNY Graduate Center
Email: vschinina@gradcenter.cuny.edu
Title: On a missing interval of integers from $\mathcal{R}_{\mathbf{Z}}(h, 4)$
- (47) **Alisa Sedunova**, Purdue University
Email: alisa.sedunova@gmail.com
Title: The multiplication table constant and sums of two squares
- (48) **James A. Sellers**, University of Minnesota Duluth
Email: jsellers@d.umn.edu
Title: Extending congruences for overpartitions with ℓ -regular non-overlined parts
- (49) **Steven Senger**, Missouri State University
Email: StevenSenger@missouristate.edu
Title: VC-dimension of subsets of the Hamming graph
- (50) **Besfort Shala**, University of Bristol, UK
Email: besfort.shala@bristol.ac.uk
Title: Multiplicative energy in number theory
- (51) **Ilya Shkredov**, Purdue University
Email: ilya.shkredov@gmail.com
Title: Some applications of the higher energy method to distribution irregularities
- (52) **Gábor Somlai**, Eötvös Loránd University and Rényi Institute, Hungary
Email: zsomlei@gmail.com
Title: Pushing the gap between tiles and spectral sets even further
- (53) **Christoph Spiegel**, Zuse Institute Berlin, Germany
Email: spiegel@zib.de
Title: An unsure talk on an un-Schur problem

- (54) **Josiah Sugarman**, Hebrew University of Jerusalem, Israel
Email: josiahsugarman@gmail.com
Title: Explicit spectral gap for the quaquaversal operator

- (55) **Christian Táfula**, Université de Montréal, Canada
Email: christian.tafula.santos@umontreal.ca
Title: Waring and Waring–Goldbach subbases with prescribed representation functions

- (56) **Johann Thiel**, New York City College of Technology (CUNY)
Email: jthiel@citytech.cuny.edu
Title: Bivariate polynomials associated with binary trees created by Quick-Sort

- (57) **Salvatore Tringali**, Hebei Normal University, China
Email: salvo.tringali@gmail.com
Title: Power monoids and the Bienvenu–Geroldinger problem for torsion groups

- (58) **Trevor D. Wooley**, Purdue University
Email: twooley@purdue.edu
Title: Equidistribution and L^p -sets for $p < 2$