List of Talks

Plenary Talks

1. Krishnaswami Alladi, Parity of the generalized divisor function with restrictions on the prime factors
2. George Andrews, George Beck’s conjectures on ranks of partitions
3. Alexander Berkovich, On a q-theoretic approach to Capparelli’s partition theorems
4. Bruce Berndt, Ramanujan—The Ultimate Superhero
5. Heng Huat Chan, Ramanujan and the partition function p(n)
6. Song Heng Chan, Ranks of partitions and some identities related to mock theta functions
7. Youn-Seo Choi, Hypergeometric series in my papers
8. Atul Dixit, On values of the Riemann zeta function at odd positive integers
9. Amanda Folsom, Quantum modular forms and applications
10. Frank Garvan, Mock theta functions: yesterday and today
11. Michael Hirschhorn, Some identities of Ramanujan, Andrews and Berndt
12. Soon-Yi Kang, Generators of the space of harmonic weak Maass forms
13. Byungchan Kim, Partial or false theta series in q-series
14. Christian Krattenthaler, A joint central limit theorem for the sum-of-digits function, and asymptotic divisibility of Catalan-like sequences
15. Amita Malik, Two stopovers in BCB’s mathematical journey: Riemann zeta and partitions
17. Ken Ono, The Jensen-Polya program for the Riemann Hypothesis and related problems
18. Peter Paule, Ramanujan, Weierstrass, and Computer Algebra
19. Michael Schlosser, The bilateral afterlife of Srinivasa Ramanujan
20. Andrew Sills, Rogers–Ramanujan type identities, old and new
21. Dennis Stanton, Comments on cranks and the rank
22. Armin Straub, On the Gaussian binomial coefficients, the simplest of q-series
23. Liuquan Wang, Representations of mock theta functions
24. Ole Warnaar, Some (q-)integrals Ramanujan would have liked
25. Kenneth Williams, Ramanujan and ternary quadratic forms
26. Ae Ja Yee, TBA

1Preliminary version, last updated May 3, 2019. For the most current version see the conference website, http://www.math.illinois.edu/nt2019/.
Contributed Talks

27. Allison Arnold-Roksandich, Creating several infinite classes of quantum modular forms
28. Zafer Selcuk Aygin, Ramanujan’s convolution sum twisted by Dirichlet characters
29. Nilufar Mana Begum, Generating functions and congruences for partition functions related to third order mock theta functions
30. Paul Beirne, Knots, the colored Jones polynomial and stability
32. Arunabha Biswas, Search for higher Mahler measure of cyclotomic polynomials.
33. Aubrey Blecher, Distinct tuples in integer partitions
34. Douglas Bowman, Euler combinatorics for divergent continued fractions after Ramanujan
35. Walter Bridges, Kadell-type partition inequalities and applications to sum-product conjectures of Kanade-Russell
36. Hannah Burson, Simultaneous core partitions into $k$ distinct parts
37. Zhu Cao, Exact covering systems, quadratic forms, and product identities for theta functions
38. Tsz Chan, On the congruence equation $p + 5 \equiv \bar{e} \pmod{p}$
39. Sunil Chebolu, Mersenne primes and Fermat primes
40. Shane Chern, Weighted partition rank and crank moments and Andrews-Beck type congruences
41. Hyunsoo Cho, A bijection between self-conjugate and ordinary partitions and counting simultaneous cores as its application
42. Madeline Dawsey, Proof of a conjecture of John Thompson using partitions
43. Karl Dilcher, Infinite products involving Dirichlet characters and cyclotomic polynomials
44. Alexander Dunn, The twisted second moment of modular half integral weight $L$–functions
45. Dennis Eichhorn, The differences between $p(n)$, $p(2n)$, and $p(2n + 1)$
46. Larry Ericksen, Properties and polynomials related to restricted binary overpartitions
47. Susan Ficken, Asymptotics of the zeros of Fine’s function
48. Craig Franze, An asymptotic expansion related to the Dickman function
49. Michael Greenblatt, Fourier transforms of indicator functions, lattice point discrepancy problems, and related matters
50. Chadwick Gugg, Ramanujan’s 40 identities for the Rogers-Ramanujan functions
51. Lakshika Gunawardana, A primitive 15–theorem?
52. Rajat Gupta, A Ramanujan-type formula for $\zeta^2(2m + 1)$ and its generalizations
53. Heekyoung Hahn, Poles of triple product $L$-functions of monomial representations
54. Bernhard Heim, Ramanujan’s $\tau$ function and non-sign changes
55. Wade Hindes, Dynamical and arithmetic degrees of random iterates
56. Nankun Hong, Rank function and Lambert series
57. Timothy Huber, A Ramanujan-Sato series primer
58. Brad Isaacsion, On some elementary character sum identities
59. Uha Isnaini, On $k$-restricted overpartitions
60. Paul Jenkins, The arithmetic of modular grids
61. Lin Jiu, On harmonic sums: integral and matrix representations with connections to partition-theoretic generalization of the Riemann zeta-function and random walks
62. Yeongseong Jo, Rankin-Selberg $L$-functions via Good Sections
63. Edna Jones, Representations by ternary quadratic forms
64. Pin Hung Kao, Almost-prime values of reducible polynomials at prime arguments
65. William Keith, $(k,j)$-colored partitions: congruences and other behaviors
66. Louis Kolitsch, A pair of congruences for $(3,5)$-regular partitions modulo 5
67. Shin-ya Koyama, Applications of Ramanujan’s method on the behavior of Euler products to Selberg zeta functions
68. Brandt Kronholm, A technique in partitions
69. Rahul Kumar, Zeros of combinations of the Riemann Ξ-function and the confluent hypergeometric function on bounded vertical shifts
70. Debanjana Kundu, On the relation between the classical Iwasawa μ = 0 conjecture and the Coates-Sujatha Conjecture A
72. Bibekananda Maji, Recent developments in the theory of the restricted partition function \( p(n, N) \) and \( \text{spt}(n, N) \)
73. Nicholas Mayers, Integer partition statistics arising from seaweed algebras
74. James McLaughlin, Some observations on Lambert series, vanishing coefficients and dissections of infinite products and series
75. Shashika Petta Mestrige, Congruences for the partition function \( p_{1+c^ℓd}(n) \)
76. Merca Mircea, Truncated theta identities and rank partition functions
77. Mojtaba Moniri, Pairs of relatively long, mod 4 disjoint consecutive runs under Mahler’s recurrence
78. Seyyed Hamed Mousavi, Pentagonal number theorem and zeroes of the Riemann zeta function
79. Hayan Nam, How to determine a partition up to conjugation using hook multisets
80. Melvyn Nathanson, Sinkhorn limits of matrices, and arithmetic applications
81. Jiakun Pan, Quantum Unique Equidistribution conjecture for Eisenstein series in the level aspect
82. Bogdan Petrenko, Some properties of nontrivial coefficients of cyclotomic polynomials
83. Meenakshi Rana, Combinatorial interpretations of mock theta functions by attached weights
84. Bruce Reznick, Equal sums of cubes of quadratic forms.
85. Herman Schaumburg, Partition identities encoded in Ramanujan’s three limit continued fraction
86. Robert Schneider, Eulerian series and the algebra of partitions
87. Satyanand Singh, Generating fourth terms of Nathanson’s lambda sequences
88. Nicolas Smoot, Some new identities from the Ramanujan-Kolberg algorithm
89. Fikreab Solomon, Zeta functions of nilpotent groups
90. Garima Sood, A finite analogue of the Beck-Chern theorem and some results on self-conjugate S-partitions
91. Jonathan Sorenson, Recent work on the Erdős-Selfridge function \( g(k) \)
92. Emily Stamm, An investigation of (nearly) weakly primes
93. Kenneth Stolarsky, Rogers-Szego polynomials and products of algebraic numbers
94. Karen Taylor, Dirichlet series and generalized Hecke groups
95. Pee Choon Toh, On a symmetric identity of Ramanujan
96. Thomas Tran, Secondary terms in asymptotics for the number of zeros of quadratic forms over integers
97. Ian Wagner, Schwartz functions and modular forms
98. Tanay Wakhare, Special classes of q-bracket operators
99. Sarah Wesley, Generalizations of Fine’s iterative identities
100. Wen-Bin Zhang, Exact Wiener-Ikehara theorems and Beurling’s generalized numbers