

A History of the Cascadia Combinatorial Feasts

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This is a brief history of the Cascadia Combinatorial Feasts (known until 2019 as the Combinatorial Potlatches) and their speakers. It was maintained by Brian Alspach (BA) through November 2001, then by Robert Beezer (RAB) through the 2016 edition. Send additions, clarifications and corrections to Amites Sarkar, amites.sarkar@wwu.edu. Copyright 2002-2024, Licensed with a Creative Commons BY-SA License.

1. Combinatorial Potlatch One, 27 February 1982, University of Washington
Branko Grünbaum *Edge-transitive planar graphs*
C. C. Lindner *How to embed a partial Steiner triple system*
2. Combinatorial Potlatch Two, 27 November 1982, Simon Fraser University
Bill Kantor *Algorithms for graph isomorphism and other group theoretic problems*
Peter Kleinschmidt *Properties of simplicial complexes and Hilbert functions*
3. Combinatorial Potlatch Three, 5 March 1983, Western Washington University
Martin Tompa *An interplay among graph theory, geometry, and computational complexity*
Henry Glover *Groups, graphs, and surfaces*
4. Combinatorial Potlatch Four, 19 November 1983, University of Washington
Geoffrey Shephard *The theory of fabrics*
Richard Weiss *Some aspects of graph theory in the classification of finite simple groups*
5. Combinatorial Potlatch Five, 19 May 1984, Simon Fraser University
Richard Weiss *Some aspects of graph theory in the classification of finite simple groups*
Egan Schulte *A combinatorial theory of regular polytopes*

BA: At this point we have lost track of the numerical sequence, but perhaps we can reconstruct the other meetings.

6. 1 December 1984, Western Washington University
Peter Cameron
Random sum-free sets and cyclic automorphisms
Tudor Zamfirescu
Most stars are thin, most thick stars are not smooth
7. 14 December 1985, University of Washington
Richard Nowakowski
Pursuit and search games on graphs
Brian Alspach
Orthogonal factorizations of graphs

8. 5 April 1986, Western Washington University
Moshe Rosenfeld
Data allocation problem: Or how to divide a square into rectangles
Dave Kirkpatrick
Algorithms for finding maximal vectors
9. 13 December 1986, University of British Columbia
Bojan Mohar
Embeddings of infinite graphs
Peter Gritzman
Finite packing and covering
10. 9 May 1987, Pacific Lutheran University
Stan Wagon
Fourteen different (?) proofs of a result about tiling a rectangle
Don Chakerian
How to fit an elephant into a small cube
11. 28 November 1987, Simon Fraser University
J.-C. Bermond
DeBruijn-Kautz networks
H. S. Wilf
The exponential formula: Combinatorics' best kept secret
12. 9 December 1989, University of Washington
Joan P. Hutchinson
When does a graph contain a spanning tree with no vertex of degree 2? (And why would you want to know this?)
Charles J. Colburn
Intersections and supports of designs
13. 12 January 1991, Simon Fraser University
C.C. Chen, National University of Singapore
The edge-toughness of a graph and of its complement
Peter Horak, Bratislava
Transversals and matroids
14. 25 January 1992, University of Puget Sound
Jason Rush, University of Washington
Very dense packings of spheres and other shapes in Euclidean n -space
Jarek Nešetřil
Dimension and boolean dimension
15. 11 February 1995, Simon Fraser University
Mike Fellows
Coping with intractability: The parametric point of view
Anna Karlin
Randomized and multipointer paging with locality of reference

16. 11 May 1996, Pacific Lutheran University
 Dick Karp
Error-Resilient molecular computation
 Gene Luks, University of Oregon
Algorithmic applications of the simple groups classifications

17. 24 May 1997, Simon Fraser University (Harbour Centre Campus)
 Gary MacGillivray, University of Victoria
The achromatic number of graphs
 Kathie Cameron
Disjoint monotone paths in simple regions: Existence, uniqueness, min-max relations, algorithms and applications
 Peter Hamburger
A graph-theoretic approach to problems in elementary and combinatorial geometry

18. 16 February 2002, University of Puget Sound,
 Brian Alspach, University of Regina and Simon Fraser University
Group actions and hamilton decompositions of complete graphs
 Brett Stevens, Carleton University (Ottawa)
On universal cycles of k -sets of an n -set
 Jonathan Jedwab, Simon Fraser University
Combinatorial design theory and the IEEE 802.12 transmission code

19. 9 November 2002, University of Victoria, Main Campus
 Andrzej Proskurowski, University of Oregon
Width parameters of graphs and discrete optimization problems
 Branko Grunbaum, University of Washington
Polyhedra: Combinatorial and geometric
 Jozef Siran, Slovak University of Technology
Links between graph theory, group theory, geometry, Riemann surfaces, and Galois theory

20. 8 November 2003, University of Victoria, Downtown Campus
 Steph van Wilgenburg, University of British Columbia (Vancouver)
Enumerative properties of Ferrers graphs
 Peter Horak, University of Washington (Tacoma)
Graph theory as an integral part of mathematics
 Rick Brewster, University College of the Cariboo (Kamloops)
Categorical aspects of graph homomorphisms
 Zdenek Ryjacek, University of Western Bohemia (Czech Republic)
Closure concepts, contractible subgraphs and hamiltonian properties of line graphs

21. 20 November 2004, Simon Fraser University, Harbour Centre Campus
 John Gimbel, University of Alaska (Fairbanks)
The traveling sales rep gets into abelian groups
 Xuding Zhu, National Sun Yat-sen University (Taiwan)
The game chromatic number of a graph
 Jozsef Solymosi, University of British Columbia (Vancouver)
Bounds on incidences and problems from additive number theory
22. 19 November 2005, Seattle University
 Bojan Mohar, University of Ljubljana (Slovenia) and Simon Fraser University
Small separations in symmetric graphs
 Jenny Quinn, Occidental College and University of Puget Sound
Determinants via determined ants
 John Caughman, Portland State University
How distance-regular graphs got all tangled up with the theory of knots
23. 11 November 2006, Portland State University
 Richard A. Brualdi, University of Wisconsin at Madison
The Bruhat order for $(0,1)$ -matrices
 Gary Gordon, Lafayette College
Graph polynomials for you; graph polynomials for me
 Matt De Vos, Simon Fraser University
Sumsets and subsequence sums
24. 29 September 2007, University of Victoria
 Manley Perkel, University of Puget Sound
Antibandwidth and cyclic antibandwidth of Kneser graphs
 John Moon, University of Alberta
On the number of proper nodes in rooted trees
 Anthony Quas, University of Victoria
Distances in positive density sets
25. 22 November 2008, University of Puget Sound
 Eric Fusy, University of British Columbia
Bijective links on planar maps via orientations
 Chuck Dunn, Linfield College
Complete multipartite graphs and the relaxed coloring game
 Ioana Dumitriu, University of Washington
Path counting and the moment method for random matrices or Fun with Walter and Theo
26. 21 November 2009, Simon Fraser University
 Glencora Borradaile, Oregon State University
Graph constrained knapsack problems
 Louis Deaett, University of Victoria
New dimensions to graph coloring
 Omer Angel, University of British Columbia
Locally transitive graphs

27. 11 December 2010, Western Washington University
Christine Kelley, University of Nebraska, Lincoln
Codes from algebraic lifts of graphs
Richard Guy, University of Calgary
Some columns Martin Gardner might have written
Kai-Uwe Schmidt, Simon Fraser University
What's special about 0.3420...? How to increase the merit factor of binary sequences
28. 19 November 2011, Seattle University
William Stein, University of Washington, Seattle
Sage — Creating a viable free open source alternative to Magma, Maple, Mathematica and Matlab
Josh Laison, Willamette University
Obstacle numbers of graphs
Peter Winkler, Dartmouth College
Cop vs Drunk: Chasing the random walker on a graph
29. 17 November 2012, Simon Fraser University
Chris Godsil, Waterloo University
Continuous quantum walks on graphs
Dan Drake, University of Puget Sound
Higher order matching polynomials and d -orthogonality
Ron Graham, University of California, San Diego
The combinatorics of solving linear equations
30. 23 November 2013, University of Victoria
Richard Hoshino, Quest University
Applying combinatorics to inspire change
Dillon Mayhew, Victoria University of Wellington
Characterizing representable matroids
Jeremie Lumbroso, Simon Fraser University
Analytic random generation of combinatorial objects
31. 22 November 2014, Western Washington University
Jane Butterfield, University of Victoria
Line-of-sight pursuit in sweepable polygons
Steven Klee, Seattle University
Face enumeration on simplicial complexes
Richard Anstee, University of British Columbia
Forbidden configurations

32. 21 November 2015, University of British Columbia
 Kilian Raschel, Université de Tours
A Human Proof of Gessel's Lattice Path Conjecture
 Daniel Johnston, University of Montana
On k -Ramsey Numbers of Graphs
 Cory Palmer, University of Montana
Turán-type Theorems for Berge-Hypergraphs
 Alexander Holroyd, Microsoft Corporation
Finitely Dependent Coloring
33. 19 November 2016, Seattle University
 Sara Billey, University of Washington, Seattle
Enumeration of Parabolic Double Cosets for Symmetric Groups and Beyond
 Shahriar Shahriari, Pomona College
Forbidden Configurations and other Combinatorial Problems for Posets of Subspaces
 Marni Mishna, Simon Fraser University
The Remarkable Ubiquity of Standard Young Tableaux of Bounded Height
34. 18 November 2017, University of Victoria
 Tinaz Ekim, Bogazici University, Istanbul
Recent Results on Equimatchable Graphs
 Jephian Lin, University of Victoria
General Spectral Graph Theory: the Inverse Eigenvalue Problem of a Graph
 Bruce Shepherd, McGill University
Stable Matchings and Extensions
35. 17 November 2018, Simon Fraser University
 Shahla Nasserar, Brandon University
The Inverse Eigenvalue Problem: Distinct Eigenvalues
 Orit Raz, University of British Columbia
Every Embedding of a Dense Graph has a Rigid Subset
 Fan Chung, University of California, San Diego
Geometric Aspects in Spectral Graph Theory
36. 23 November 2019, Western Washington University
 Joris van der Hoeven, Ecole Polytechnique
Creative Telescoping via Reductions
 Riana Roux, Stellenbosch University
Reconfiguration Problems in Irredundance
 Sue Whitesides, University of Victoria
On Hamiltonicity in Grid Graphs

37. 21 November 2020, University of Victoria
Mike Henning, University of Johannesburg
Upper Bounds on the Domination and Total Domination Numbers of a Graph in terms of Minimum Degree
- Natasha Morrison, University of Victoria
The Typical Structure of Sets with Small Sumset
- Chip Klostermeyer, University of North Florida
Eternal Chromatic Numbers of Graphs

This conference was unusual in two ways. First, it was held remotely due to the coronavirus pandemic. Second, it was held in honor of Gary MacGillivray, and featured many contributions from among Gary's friends, students and colleagues, past and present.

38. 20 November 2021, University of Victoria
Shuxing Li, Simon Fraser University
Packings of Partial Difference Sets
- Amarpreet Rattan, Simon Fraser University
Generalized Mahonian Statistics and Minimal Factorizations of the Full Cycle
- Boram Park, Ajou University, Republic of Korea
Independent Domination of Regular Graphs

Once again, this conference was held remotely.

39. 19 November 2022, Seattle University
Cynthia Vinzant, University of Washington, Seattle
Determinantal representations and the principal minor map
- Hays Whitlatch, Gonzaga University
Counting power domination sets in complete m -ary trees
- Imre Bárány, Rényi Mathematical Institute, Budapest
Pairwise intersecting convex sets and cylinders in \mathbf{R}^3

40. 26–28 April 2024, University of Puget Sound
Christine Kelley, University of Nebraska-Lincoln
Decoding failures of quantum graph-based codes
- David Farmer, American Institute of Mathematics
An unauthorized and inaccurate history of PreTeXt
- Andy Zimmer, University of Wisconsin-Madison
Counting in terms of eigenvalues
- Dylan Poulsen, Washington College
Authoring a PreTeXt book as a semester-long class project in probability theory
- Sam Vandervelde, Proof School
Riddle of the dots
- Gary MacGillivray, University of Victoria
Switching m -edge coloured graphs

This conference was held in honor of Rob Beezer, and featured many contributions from among Rob's friends, students and colleagues, past and present.

41. 26 October 2024, University of Victoria
Melissa Huggan, Vancouver Island University
Cops and robbers variants: recent work and open problems
- Saieed Akbari, Sharif University (visiting Simon Fraser University)
A linear lower bound for the square energy of graphs
- Jonathan Noel, University of Victoria
How to make a regular tournament “look random”

Lightning talks

- Benjamin Buckley, Simon Fraser University
Uniform sampling and visualization of 3D-reluctant walk
- John Gimbel, University of Alaska
A short proof of a result on zonal labels
- Krishna Narayanan, Simon Fraser University
Monitoring edge-geodetic sets in graphs
- Haley Freigang, University of Victoria
Minimally unavoidable graphs for a cycle of length 4

BA: You will note that Richard Weiss is listed as giving the same talk at two consecutive Potlatches. I vaguely recall that Richard had to cancel his appearance for the first of the two listed so that I think the later listing is correct. I undoubtedly have an early announcement in my files. It is certainly the case that he talked only once.