

# Presentation Schedule

Thursday, April 12<sup>th</sup>, 2018

Morning Session: 8:30 AM - 12:00 PM

**FEATURED PRESENTATION**

**★ YOUTH RECOMMENDED**

	<b>Speaker</b>	<b>Title</b>		
8:30 AM	Brian Hopkins	Difference Dice	6min	8:30 AM
	Ryuhei Uehara	Design Schemes for Fair Dice	6min	
	James Grime	Nontransitive dice for three players	6min	
	Kenneth Brecher	Introducing the PiTOP	6min	
	Henry Segerman and Sabetta Matsumoto	Design of hinged 3D auxetic mechanisms	6min	
	David Nacin	Solutions to Klein Four Puzzles	6min	
	Adam Rubin	Functional Impossible Objects	6min	
	Jane Kostick ★	13 Piece Puzzles	6min	
	Bernardo Recaman ★	Ramanujan Sums	6min	
	Akio Hizume	Fibonacci Jigsaw Puzzle etc.	6min	
	Hirokazu Iwasawa	Classic False Coin Puzzles without Mathematical Induction	6min	
	<i>Break</i>		<i>30min</i>	
	<b>Doris Schattschneider</b>	<b>The Story of Marjorie Rice</b>	<b>45min</b>	
	Jaap Scherphuis	Developments in Pentagonal tilings	5min	
	Bob Hearn	There are only 15	6min	
	Laura Taalman ★	Printing Perfect Pentagons	6min	
	Kate McKinnon	Engineering and Art: The Magic of the Kaleidocycle and the Contemporary Geometric Beadwork project	6min	
	Jordan Gold and Elan Lee ★	How we built the world's smartest computer with a few pieces of cardboard and a pineapple	10min	
12:00 PM				12:00 PM

Afternoon Session: 1:30 PM - 5:30 PM

	<b>Speaker</b>	<b>Title</b>		
1:30 PM	John Rausch, Nick Baxter, and Bill Cutler	A Fireside Chat with Stewart T. Coffin	27min	1:30 PM
	David Michael Greene	Self-Construction in Conway's Life	6min	
	Adam P. Goucher	Evolving lifeforms on lattices	6min	
	Tomas Rokicki	HashLife	6min	
	James Emmett Gardner	Growing up Around Martin Gardner: Another Round	30min	
	Cindy Lawrence	Play Truchet: Using the Truchet tiling to engage the public with mathematics	6min	
	R. William Gosper	True planefills versus "Spacefilling Curves"	6min	
	Gary Antonick	Thirteen Bounces	5min	
	Yossi Elran ★	G4G's Celebration of Mind -- exciting the public and expanding MG's legacy	4min	
	Louis Hirsch Kauffman	Rope Tricks and Topology	6min	
	<i>Break</i>		<i>30min</i>	
	Eleftherios Pavlides	The Geometry of Motion of the Chiral Icosahedral Hinge Elastegrity	6min	
	Robert Bosch	Figurative Subgraphs	6min	
	Debra A Coombs	Geometry in five-dimensions: Building quasicrystals from Penrose tiling	6min	
	Gwen Fisher ★	Beaded Tessellations of Polyhedra and Penrose Tilings	6min	
	Jim Propp ★	You Can't Count to Thirteen ...	6min	
	Spandan Bandyopadhyay	Hexprimes	6min	
	Erik Demaine	Sliding Coins	6min	
	Gabriel Doran Kanarek	Repetitive Patterns in the Juggler Sequence	6min	
	Alex Bellos	Puzzle Ninja	5min	
	William Gasarch	The Muffin Problem	5min	
	Stephen Wolfram	TBA	6min	
5:30 PM				5:30 PM

**Presentation Abstracts Available Online: [www.gathering4gardner.org/g4g13-abstracts.pdf](http://www.gathering4gardner.org/g4g13-abstracts.pdf)**

# Presentation Schedule

Friday, April 13<sup>th</sup>, 2018

**FEATURED PRESENTATION**

★ **YOUTH RECOMMENDED**

Morning Session: 8:30 AM - 11:15 AM

	Speaker	Title		
8:30 AM	Miguel Palomo	★ The Sudoku Ripeto Family	5min	8:30 AM
	James Lee	★ A Slick Solution to the Tax Man Problem	6min	
	Elwyn Berlekamp	Sol Golomb tribute video	6min	
	Donald Bell	★ Loyd Polyominoes	6min	
	Aaron Siegel	Polyformer	6min	
	Tom van der Zanden	Packing polyominoes into a 3-by-n box is as hard as it gets	6min	
	Anany Levitin	Polyomino Puzzles and Algorithm Design Techniques	5min	
	Stewart Temple Coffin	Martin's Menace	4min	
	Robert P Crease	★ Super Thirteen: Welcome to G4G's Teenage Years!	5min	
	Colin Wright	★ Thirteen - Insufficiently Maligned	5min	
	<i>Break</i>			30min
	Erno Rubik	Cubic Tales	45min	
	George Hart	★ Mathematical Construction Activities During the Excursion	10min	

11:15 AM

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11:15 AM

## RITZ-CARLTON MAP



- 1) Conference Ballroom:**  
Presentations, Dinners, & Entertainment
- 2) Sales & Exhibition Rooms**
- 3) Registration, Bar Bets, & Youth Lounge**
- 4) Thank You Lunch & Gift Exchange Bag Pickup**

# Presentation Schedule

Saturday, April 14<sup>th</sup>, 2018

FEATURED PRESENTATION

★ YOUTH RECOMMENDED

Morning Session: 8:30 AM - 12:00 PM

8:30 AM	Speaker	Title		8:30 AM
	Akira Nishihara	★ Geometric toys	6min	
	Kate Jones	★ Lucky 13	6min	
	Scott Kim	Motley Dissections	6min	
	Rochelle Kronzek Miller	Raymond and Martin -- Pioneers and Legends	30min	
	Kokichi Sugihara	★ Evolution of Impossible Objects	6min	
	Stephen Macknik	★ Champions of Illusion	6min	
	Alexa Meade	TBA	5min	
	Sabetta Matsumoto and Henry Segerman	Non-euclidean virtual reality	12min	
		<i>Break</i>	30min	
	<b>Manjul Bhargava</b>	<b>Some Magical Numbers and Their Uses in Magic and Mathematics</b>	<b>45min</b>	
	Robert P Crease	★ How is Science Denial Possible?	6min	
	Mike Naylor	The Last Crumb	6min	
	Derrick Chung	An Elegant Solution to Rusduck's "A Study in Stud"	6min	
	Vladimir Bulatov	Cross sections of three dimensional hyperbolic tilings	6min	
	Elwyn Berlekamp	Gallimaufry of Games	6min	
12:00 PM				12:00 PM

Afternoon Session: 1:30 PM - 5:30 PM

1:30 PM	Speaker	Title		1:30 PM
	Dana S Richards	★ Martin Gardner, Annotator	30min	
	Thomas Francis Banchoff	Foxtrot Half-Empty Half-Full Problem, including 13	6min	
	Theodore Gray	★ Mechanical Gifs	6min	
	Dana Mackenzie	2184 (Oh, the Absurdity)	6min	
	Paul Hidebrandt and Amina Buhler-Allen	A tribute to Marc Pelletier	20min	
	George I. Bell	The Sailing Stones of Death Valley	6min	
	Howard I Cannon	Demonstrating math with carefully drawn triangles in JavaScript	6min	
	Raymond Hall	★ Physics Fun: The use of Social Media as a Museum of Science and Math	6min	
	Margaret Kepner	4 x 13	6min	
	Duane A Bailey	A Grammatical Approach to the Curling Number Conjecture	6min	
		<i>Break</i>	30min	
	Adam Atkinson	★ Medieval French Poetry	5min	
	Tanya Khovanova	Crypto and Fractal Word Searches	6min	
	Colm Mulcahy	★ Martin Gardner Word Play	5min	
	Joshua Pines	Scrabble Seven-letter Words	6min	
	Tom Bessoir	Prime Perfect	6min	
	Rik van Grol	Balance puzzles -- you either love them or curse them	5min	
	Stuart Moskowitz	★ Lewis Carroll Should Have Taught Sixth Grade Math	6min	
	Pete McCabe	Persistimis Possessiamo	6min	
	Robert Fathauer	★ Knotting and Numbering Kite Tiling Rosettes	6min	
	Robert W Vallin	Maverick Solitaire and Three-Card Poker	6min	
	Lyman Porter Hurd	Kadon's Dezign-8	6min	
	Nancy Blachman	How I Finagled nearly 13 Invitations to White House Events in 2016	5min	
5:30 PM				5:30 PM

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# Presentation Schedule

Sunday, April 15<sup>th</sup>, 2018

★ YOUTH RECOMMENDED

Morning Session: 8:30 AM - 11:30 AM

	<b>Speaker</b>	<b>Title</b>		
8:30 AM	Dick Esterle	ALMOST 13 - ICOSAHEDRON let me count the ways	6min	8:30 AM
	Gerard Westendorp	Hinged polyhedra and hinged tessellations.	6min	
	Yossi Elran	★ 13 ways to tie a knot in a strip of paper	5min	
	Peter Knoppers	The elusive 13 piece complete set puzzle	5min	
	Michael Tanoff	Mr. Apollinax's Wedding Ring	6min	
	Susan Goldstine	Symmetry Samplers	6min	
	Gergo Kiss	The Derivation of the Spidron Formula	6min	
	Ricardo Teixeira	Si Stebbins and Group Theory	6min	
	Ann Schwartz	Making Waves: The Pentaflexagon	6min	
	Andrew John Rhoda	The Slocum Mechanical Puzzle Collection at the Lilly Library	6min	
	Colin Beveridge	An Old-Timey Cipher	6min	
	Karl Schaffer	★ Edgy Puzzles	6min	
	Hilarie Orman	★ Mental Factoring	6min	
	Carolyn Yackel	Enough Lace Patterns for Fibonacci	6min	
	Henry Strickland	Rainy Day Stories (in the Temporal Logic called D)	6min	
	Oded Margalit	PonderThis	6min	
	Ben Chaffin	A Tale of Two Powers: Finding zeros in powers of 2	6min	
	ET Trigg	Bidding in Contract Bridge considered as a communication channel	6min	
	Greg N. Frederickson	Hidden in Plane Sight: the Extraordinary Vision of Ernest Irving Freese	6min	
	Ryan William Morrill	Playing nice with a weighted coin	6min	
	Lucas Garron	The Perfect Easing Function	6min	
	Ron Taylor	Mathematics of color addition games	6min	
	Roger Russell	Misconceptions of Measurement: Time, Space and Numbers	5min	
11:30 AM	Manderscheid			11:30 AM

Afternoon Session: 12:30 PM - 2:00 PM

	<b>Speaker</b>	<b>Title</b>		
12:30 PM	James Joseph Solberg	(Phi)ve is Magic	6min	12:30 PM
	Robert Munafo	Using the Analogue Approximation Finder	6min	
	David Hall	Recipe for a 'bola Honeycombs	6min	
	George Hart	★ Knotted Bracelet	6min	
	William G Ames	Extending the 10958 problem	6min	
	Nathaniel Wing Segal	★ Deconstructing Magic Squares	6min	
	Masayoshi Iwai	Tilings of Equilateral Tridecagons	6min	
	Carl N. Hoff	From Untouchable 11 to Hazmat Cargo	6min	
	Yoshiyuki Kotani	Tiling of 123456-edged hexagon	6min	
	Charles Bernard	★ How Martin Gardner Helped Me Keep My Sanity as a Math Teacher for 50 Years	6min	
	Sonenshein			
	Barney Sperlin	How Safe Is It?	6min	

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# G4G13 ADDENDUM

REVISION

## Revisions to the Presentation Schedule for THURSDAY, April 12th:

Adam Rubin	Functional Optical Illusions	6min
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Afternoon Break

Rochelle Kronzek Miller, Jason Rosenhouse, and Elizabeth Carpenter	Honoring the Late, Great Storyteller of Logic - Raymond Smullyan	30min
Eleftherios Pavlides	The Geometry of Motion of the Chiral Icosahedral Hinge Elastegry	6min

## Revisions to the Presentation Schedule for FRIDAY, April 13th:

Robert P Crease	Super Thirteen: Welcome to G4G's Teenage Phase!	6min
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## Revisions to the Presentation Schedule for SATURDAY, April 14th:

Scott Kim	Motley Dissections	6min
Robert Bosch	Figurative Subgraphs	6min
Spandan Bandyopadhyay	Hexprimes	6min
Alex Bellos	Puzzle Ninja	5min
Jim Propp	You Can't Count to Thirteen ...	6min
Kokichi Sugihara	Evolution of Impossible Objects	6min
Stephen Macknik	Champions of Illusion	6min
Alexa Meade	2D+3D	5min

Manjul Bhargava	Some Magical Numbers and Their Uses in Magic and Mathematics	45min
Carlos Vinuesa	Dealing with Shuffles	6min
Robert P Crease	How is Science Denial Possible?	6min

Lunch Break

Speaker	Title	
Dana S Richards	Martin Gardner, Annotator	18min
Darren Glass	Chutes and Ladders Without Chutes or Ladders	6min
Peter Winkler	Puzzles that Solve Themselves	6min
Thomas Francis Banchoff	Foxtrot Half-Empty Half-Full Problem, including 13	6min

Tom Bessoir	prime perfect	6min
Rik van Grol	Balance puzzles -- you either love them or curse them	5min
Stuart Moskowitz	Lewis Carroll Should Have Taught Sixth Grade Math	6min
James Joseph Solberg	(Phi)ve is Magic	6min
Robert Fathauer	Knotting and Numbering Kite Tiling Rosettes	6min

## Revisions to the Presentation Schedule for SUNDAY, April 15th:

Lunch Break

Speaker	Title	
Pete McCabe	Persistimis Possessiamo	6min
Robert Munafo	Using the Analogue Approximation Finder	6min
David Hall	Recipe for a 'bola Honeycombs	6min
George Hart	Tying the Knot	6min
Bill Ames	Extending the 10958 problem	6min
Nathaniel Segal	Deconstructing Magic Squares	6min