

# Gathering for Gardner 12

Date: Thursday, 31/Mar/2016

8:30am -10:00am	<b>ThuAM1</b> <b>Hypernom: Mapping VR Headset Orientation to S^3</b> Hart, Vi; Hawksley, Andrea; Segerman, Henry; ten Bosch, Marc <b>64=65 and Fibonacci, as Studied by Lewis Carroll</b> Moskowitz, Stuart <b>Math: A Tool for Understanding Tibet</b> Beier, Julie <b>How Math Can Save Your Life</b> Frontczak, Susan Marie <b>Animated Problem Solving</b> Rosenthal, Alex <b>Monododecahedra</b> Banchoff, Thomas; Pavlides, Lefteri <b>Shape Shifting Paper Elastegrity</b> pavlides, eleftherios; Banchoff, Thomas; Thompson, Sarah <b>Twelve ways to trisect an angle</b> Richeson, David <b>The Sleeping Beauty Paradox Resolved</b> Mutalik, Pradeep <b>The De Vicci Cube, and other mysteries from the fourth dimension</b> Huber, Greg
10:30am -12:00pm	<b>ThuAM2</b> <b>Chemical Pi</b> Conway, John Horton <b>Topologically Interesting Felt</b> Fisher, Gwen Laura <b>Larger Golomb Rulers</b> Rokicki, Tomas <b>Trans-Sedenion Meditations with the Moufang Clan</b> Strickland, Henry <b>The Comptometer, a mechanical calculating machine</b> Scherphuis, Jaap <b>making 3d printable fractals</b> Bulatov, Vladimir <b>Head Lines</b> Goldklang, Lew <b>Rhombofoam in Zome</b> Vorthmann, Scott
1:30pm -3:30pm	<b>ThuPM1</b> <b>My Dear Friend Martin</b> Randi, James <b>Playing Penney's Game with Roulette</b> Vallin, Robert

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**Coordinated Motion around a Dodecahedron**

Kostick, Jane

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**The PhiTOP: A Golden Ellipsoid**

Brecher, Kenneth

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**New Polyhedral Dice**

Fathauer, Robert; Segerman, Henry; Bosch, Robert

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**Numerically Balanced Dice**

Bosch, Robert

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**Secret Messages in Juggling and Card Shuffling**

Demaine, Erik

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**Fibonacci Lemonade**

Hawksley, Andrea Johanna

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**Poly-Twistor and Fibonacci Colosseum**

Hizume, Akio

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**The 100 Prisoners Puzzle Revisited**

Elran, Yossi

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**G4G'S CELEBRATION OF MIND**

Elran, Yossi

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**Quantum Physics Truth Tables**

Lieb, Shannon

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**The symmetries of the Azorean sidewalks in a deck of cards**

Carvalho, Alda; Santos, Carlos Pereira dos; Silva, Jorge Nuno; Teixeira, Ricardo Cunha

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4:00pm

**ThuPM2**

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5:30pm

**The Tools of the Trade**

England, Jason

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**Building a Puzzle Technology Company**

Leban, Roy

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**The Pamphlets of Lewis Carroll: Games, Puzzles, & Related Pieces**

Morgan, Christopher

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**Tetraball Puzzle**

Esterle, Richard

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**Watch the Lizard Go Through the Jungle - A Topological Rope Trick**

Sonenshein, Charles

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**Puzzles and the University: Connecting the Pieces with the Slocum Mechanical Puzzle Collection**

Rhoda, Andrew

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**Update on Double Circle Real 5x5x5 and Introduction of the WOW5 Puzzle Ring**

Hoff, Carl

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**Breaking squares and cubes**

Clarke, Paul

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**Spherical image transformations and the Droste effect**

Segerman, Henry

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**Penis Covers & Puzzles / Brain Injuries & Brain Health**

Wingard-Phillips, Gini

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**Making Your Passions Accessible**

Cravotta, Nicholas

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Date: Friday, 01/Apr/2016

8:30am -10:00am	<b>FriAM1</b> <b>Twelveness, a Fibonacci verse</b> Jones, Kate <b>An Octonion Demonstrator</b> Kauffman, Louis <b>Gardner on Education: Training the Mind and Entertaining the Spirit</b> Wilder, Jim <b>Reaching For Infinity Through Honeycombs</b> Nelson, Roice; Segerman, Henry <b>Loop - pool on an ellipse</b> Bellos, Alex <b>Patterns of the Universe</b> Bellos, Alex; Harriss, Edmund <b>The geometer dog who did not know calculus</b> Silva, Jorge Nuno; Santos, Carlos; Carvalho, Alda <b>Archimedes Hourglass</b> Bogart, Rod <b>Some Self-Working Topological Tricks</b> Iwasawa, Hirokazu <b>Making Math Visible</b> Hart, George; Heathfield, Elisabeth <b>Fun With Mathematics and Baking</b> Orman, Hilarie
10:30am -11:45am	<b>FriAM2</b> <b>The Magic of the Gilbreath Principle</b> Maven, Max <b>Bus Ticket Roulette</b> Hess, Dick <b>Playing The Game of Life</b> Mitton, Mark; Justus, Nathan; Gardner, Jim <b>Puzzling dissections of the 24-cell</b> Hearn, Bob <b>Hands-on Mathematical Constructions During the Excursion</b> Hart, George
12:00pm -5:00pm	<b>FriPM</b>

Date: Saturday, 02/Apr/2016

8:30am - 10:00am	<b>SatAM1</b> <b>Why a Mathematics Festival?</b> Blachman, Nancy <b>Integer Sequences K-12</b> Hamilton, Gordon <b>Tetrahedrons made simple.</b> Bexfield, Simon <b>Developing the Martin Gardner Modular Origami G4G12 Rhombic Dodecahedron</b> Knoppers, Peter <b>The Samaritani Formula</b> Atkinson, Adam <b>Flexagon Secrets</b> Schwartz, Ann <b>Liar/Truth Teller Patterns on Square Planes</b> Kotani, Yoshiyuki <b>Combating Pseudoscience</b> Crease, Robert <b>Speedsolving the Rubik's Cube – what are the limits?</b> van Grol, Rik <b>Sudoku Colorings of a 16-cell Pre-Fractal</b> Tsuiki, Hideki; Tsukamoto, Yasuyuki
10:30am - 12:00pm	<b>SatAM2</b> <b>Rendering the real surreal</b> Meade, Alexa <b>An Exhaustive Review of Current Calculations of Pi with Pies (with areas for future research)</b> Parker, Matt <b>Hacking the Hackers: 15 years of creating puzzles for some of the world's best hackers</b> Clarke, Ryan <b>Impromptu Magic with Matches</b> Gardner, Jim; Mitton, Mark <b>Star Numbers of Geometric Shapes</b> Laison, Josh; Livingston, David; Gardiner, Benjamin; Bishop, Andrew <b>On surrounding a polygon</b> Kaplan, Craig <b>JMA Outstanding Paper Award</b> Kaplan, Craig <b>The Geometry Problems of Almada Negreiros</b> Freitas, Pedro Jorge; Costa, Simão Palmeirim <b>Warning: This book turns into a robot</b> Rubin, Adam <b>Advances with "Go First Dice"</b> Harshbarger, Eric
1:30pm - 3:30pm	<b>SatPM1</b> <b>All hail 12</b>

Oberg, Bruce

**Treacherous Twelve**

Crease, Robert; Crease, Alexander

**Impromptu Magic with Rubber Bands**

Gardner, Jim; Mitton, Mark; Garrett, Dan

**The Leaning Tower of Pingala**

Guy, Richard

**52 Master Pieces**

Cohen, David

**Thinking Inside and Outside the Box**

Khovanova, Tanya

**Miracles for Sale**

Fajuri, Gabe

**Two dimensional Parquet deformations**

Harriss, Edmund

4:00pm

**SatPM2**

5:30pm

**The Annotated Alice: Creating the 150th Anniversary Deluxe Edition**

Burstein, Mark; Gardner, Jim

**Thomas Edison's Tangram Movie**

Tanoff, Michael

**Impromptu Magic with Rope**

Gardner, Jim; Mitton, Mark

**Juvenilia**

Richards, Dana

**Recent developments concerning Minsky's "Circle" Algorithm**

Gosper, R. William

Date: Sunday, 03/Apr/2016

9:15am - 10:30am	<b>SunAM1</b>  <b>12 movies of cube, fractal, pentagon, tessellation, etc.</b> Iwai, Masayoshi  <b>The Mutando of Insanity</b> Roldan Roa, Erika Berenice; Pérez Martínez, María Isabel  <b>Son of O'Gara</b> Tanoff, Michael  <b>Terasaki Ramps: A Glimpse into the Geometrical Architecture of the Cell</b> Huber, Greg  <b>Invention of the paper gear.</b> Jespersen, Bjarne  <b>Colorings of pentomino tilings</b> Muñiz, Alexandre  <b>Minimalist Origami Alphabets</b> Mosely, Jeannine  <b>Drawn to Wonder</b> Newswanger, Craig  <b>Rectangle free colorings: On the border between recreational and "serious" mathematics</b> Gasarch, William  <b>Zen of the Z-Pentomino</b> Kepner, Margaret Elizabeth  <b>Solving Diophantine Equations with the Rho Method</b> Schroeppel, Rich  <b>ipuz: An Open Standard Format for "Pencil and Paper" Puzzles</b> Leban, Roy
11:00am - 1:00pm	<b>SunAM2</b>
2:00pm - 3:00pm	<b>GiftExchange</b>