

# SCHEDULE FOR THE BRIDGES BALTIMORE CONFERENCE

**Wednesday July 29, 2015**

**University of Baltimore**

**John and Frances Angelos Law Center**

**1401 North Charles Street (North East Corner of Charles and Mount Royal)**

**REGISTRATION: July 28, 2015, 4pm – 6pm and July 29, 2015, 8:00am - 9:30am**

<b>UB Moot Court</b>				<b>Morning 9:30am – 12:00pm</b>	<b>SESSION 1</b>	<b>Chair: Kelly Delp</b>
W JUL 29	1	9:30	WLCM	<b>Bridges Baltimore 2015 Organizing Committee</b> <i>Welcoming Remarks (No registration during this time) UB Administrations and Bridges Board</i>		
W JUL 29	2	10:00	PLEN	<b>The Arts of the Hidden</b> Alan Kay		
W JUL 29	3	11:00	PLEN	<b>Highly Unlikely Triangles and Other Impossible Figures in Bead Weaving</b> Gwen Fisher		

**2015 Art Exhibition Opening 12:00pm – 12:30pm (Reception supported by JMA) – Outside Moot Court Lobby**

<b>UB Room 1</b>				<b>Midday 2:00pm – 3:30pm</b>	<b>SESSION 2</b>	<b>Chair: Tom Verhoeff</b>
W JUL 29	1	2:00	REG	<b>Symmetric yet organic: Fourier Series as an Artist's Tool (JMA Invited Speaker)</b> Frank Farris		
W JUL 29	2	2:30	REG	<b>Figurative Tours and Braids</b> Robert Bosch and Tom Wexler		
W JUL 29	3	3:00	REG	<b>Three Families of Mitered Borromean Ring Sculptures</b> Tom Verhoeff and Koos Verhoeff		

<b>UB Room 2</b>				<b>Midday 2:00pm – 3:30pm</b>	<b>SESSION 3</b>	<b>Chair: Donald Spector</b>
W JUL 29	1	2:00	REG	<b>Designing 2D Ordinary Differential Equations To Obtain Abstract Paintings, Illustrations</b> ... Ergun Akleman and Huseyin Kocak		
W JUL 29	2	2:30	REG	<b>A View of Music</b> Ellen Gethner, Shannon Steinmetz and Joseph Verbeke		
W JUL 29	3	3:00	REG	<b>The Musical Canon Inside Differential Equations</b> Donald Spector		

UB Room 3				Midday 2:00pm – 3:30pm	SESSION 4	Chair: Kenneth Brecher
W JUL 29	1	2:00	SHRT	<b>Gallery Layout in Borges' Library of Babel</b> Jonathan Millen		
W JUL 29	2	2:15	SHRT	<b>Theory of Intersection</b> Karl Kattchee		
W JUL 29	3	2:30	SHRT	<b>Schematic Drawings of the Polychora</b> Taneli Luotoniemi		
W JUL 29	4	2:45	SHRT	<b>Perspectives on Borges' Library of Babel</b> Cj Fearnley and Jeannie Moberly		
W JUL 29	5	3:00	SHRT	<b>Design Anamorphosis in the Math Class!</b> Kristóf Fenyvesi and Markus Hähkiöniemi		
W JUL 29	6	3:15	SHRT	<b>The “ΦTOP”: A Golden Ellipsoid</b> Kenneth Brecher		

UB Room 4-5				Midday 2:00pm – 3:30pm	SESSION 5	Workshop
W JUL 29	Room 4	2:00	WORK	<b>Mathematics Through the Lens of a Kaleidoscope A Student Centered Approach to Building Bridges between Mathematics and Art</b> Gail Kaplan, Rachael Gross and Kim McComas		
W JUL 29	Room 5	2:00	WORK	<b>Math-Infused Art Lessons, Art-Infused Math Lessons</b> Rachelle Guernsey		

**Coffee Break 3:30pm – 4:00pm**

UB Room 1				Afternoon 4:00pm – 5:30pm	SESSION 6	Chair: James Mallos
W JUL 29	1	4:00	REG	<b>Great circles: the analysis of a concept in mathematics and poetry</b> Emily Grosholz		
W JUL 29	2	4:30	REG	<b>3D-Dithered Ortho-Pictures: 3D Models from Independent 2D Images</b> Gershon Elber		
W JUL 29	3	5:00	REG	<b>Knotology Baskets and Topological Maps</b> James Mallos		

***The Platonic Solids: a Three-Dimensional Textbook*** is an exhibit in room 204 at the 2015 Bridges conference that includes over 30 geometric sculptures, depicting the geometric relationships between the five Platonic solids, as well as extensive text explaining and developing those geometric ideas. It is accessible to those with little mathematical background, but those sophisticated in math will likely find some delightful surprises.

UB Room 2				Afternoon 4:00pm – 5:30pm	SESSION 7	Chair: Stanley Spencer
W JUL 29	1	4:00	REG	<b>Magnetic Circle Packing in Creative Outreach and Refreshment</b> Robin Linhope Willson		
W JUL 29	2	4:30	REG	<b>Integrating Origami Art with Mathematics in a College General Studies Course</b> Norma Boakes		
W JUL 29	3	5:00	REG	<b>The Stomachion in Wonderland</b> Stanley Spencer		

UB Room 3				Afternoon 4:00pm – 5:30pm	SESSION 8	Chair: Susan McBurney
W JUL 29	1	4:00	SHRT	<b>Flowing, Organic Forms Using Adaptive Line-Drawing</b> David Chappell		
W JUL 29	2	4:15	SHRT	<b>Building Polyhedra from Polygons with Colored Edges</b> Mircea Draghicescu and Anca Browne		
W JUL 29	3	4:30	SHRT	<b>A Pattern Tracing System for Generating Paper Sliceform Artwork</b> Yongquan Lu and Erik D. Demaine		
W JUL 29	4	4:45	SHRT	<b>Geometric Visual Instruments Having Pinnate Forms</b> Shunsuke Akimoto and Akihiro Matsuura		
W JUL 29	5	5:00	SHRT	<b>Chains of Antiprisms</b> Tom Verhoeff and Melle Stoel		
W JUL 29	6	5:15	SHRT	<b>From Mathematical Curves to Decorative Ornaments</b> Susan McBurney		

UB Room 4-5				Afternoon 4:00pm – 5:30pm	SESSION 9	Workshop
W JUL 29	Room 4	4:00	WORK	<b>Composing Mathematical Poetry</b> Carol Dorf		
W JUL 29	Room 5	4:00	WORK	<b>Thinking like a Pianist/Mathematician/Potter-Designer: Strategies for Tuning Ocarinas</b> Elizabeth Paley		

Reception 6:00pm – 7:00pm

The Mathematics of Being Human  
*Sponsored by Mathematical Sciences Research Institute (MSRI)*  
 Wednesday July 29, 2015 at 7:00pm  
 The Wright Theater  
 The University of Baltimore

# MSRI Bridges Public Event

*Sponsored by Mathematical Sciences Research Institute (MSRI)*

## The Mathematics of Being Human

A play by Michele Osherow and Manil Suri – Directed by Alan Kreizenbeck  
Presented by the University of Maryland, Baltimore County (UMBC)

Battle lines are drawn when an English professor and a mathematician are compelled to co-teach a course at a university bent on promoting interdisciplinarity. They tussle over everything: from the value of 'nothing' in *King Lear*, to the fractal nature of cauliflower. Will they be able give their students a glimpse of synthesis or will their insularity prove impossible to surmount? In their provocative new play *The Mathematics of Being Human*, professors Michele Osherow (English) and Manil Suri (Mathematics) explore how finding common ground between two very different ways of thinking can shape our understanding of what it means to be human.



## Thursday July 30, 2015

UB Room 1				Morning 9:30am – 11:00am	SESSION 10	Chair: Paul Gailiunas
T JUL 30	1	9:30	REG	<b>The Curious Creativity of John Horton Conway</b> Siobhan Roberts		
T JUL 30	2	10:00	REG	<b>The Golden Spiral: The Genesis of a Misunderstanding</b> Paul Gailiunas		
T JUL 30	3	10:30	REG	<b>A Divine Error</b> Dirk Huylebrouck		

UB Room 2				Morning 9:30am – 11:00am	SESSION 11	Chair: Emily Grosholz
T JUL 30	1	9:30	REG	<b>Can Human Assistance Improve a Computational Poet?</b> Carolyn Lamb, Daniel Brown and Charles Clarke		
T JUL 30	2	10:00	REG	<b>Poetry from Finite Projective Planes</b> Daniel May and Courtney Huse Wika. Galaxies Containing Infinite Worlds		
T JUL 30	3	10:30	REG	<b>Julia Randall's Poetic Finitude: Mapping the Infinite onto a Poem</b> Emily Grosholz		

UB Room 3				Morning 9:30am – 11:00am	SESSION 12	Chair: Patrick Honner
T JUL 30	1	9:30	SHRT	<b>Turing Patterns in Photoshop</b> Andrew Werth		
T JUL 30	2	9:45	SHRT	<b>Emergent Orange</b> Jim Bumgardner		
T JUL 30	3	10:00	SHRT	<b>Two-Frame Animations in Conway's Game of Life</b> Robert Bosch		
T JUL 30	4	10:15	SHRT	<b>Exploring the Manifold of Image Patches</b> Yevgen Matviychuk and Shannon M. Hughes		
T JUL 30	5	10:30	SHRT	<b>Into the Shadows: Approximating Images by Orthogonal Projection</b> Kelly Delp and Sam Lloyd		
T JUL 30	6	10:45	SHRT	<b>Monte Carlo Art in Scratch</b> Patrick Honner		

<b>UB Room 4-5</b>				<b>Morning 9:30am – 11:00am</b>	<b>SESSION 13</b>	<b>Workshop</b>
T JUL 30	Room 4	9:30	WORK	<b>The Aesthetics of Scale: Weaving Mathematical Understandings</b> Eva Knoll, Wendy Landry, Tara Taylor, Paul Carreiro and Susan Gerofsky		
T JUL 30	Room 5	9:30	WORK	<b>Lissajus Curves: an Experiment in Creative Coding</b> Lali Barrière		

**Coffee Break 11:00am – 11:30am**

<b>UB Moot Court</b>				<b>Morning 11:30am – 12:30pm</b>	<b>SESSION 14</b>	<b>Chair: Carlo H. Séquin</b>
T JUL 30	1	11:30	PLEN	<b>The Symmetries of Things</b> John H. Conway		

**Lunch Break 12:30pm – 2:00pm**

<b>UB Room 1</b>				<b>Midday 2:00pm – 3:30pm</b>	<b>SESSION 15</b>	<b>Chair: James Mai</b>
T JUL 30	1	2:00	REG	<b>Math Bugs</b> Mike Naylor		
T JUL 30	2	2:30	REG	<b>Fun with Whirls</b> Kerry Mitchell		
T JUL 30	3	3:00	REG	<b>Permutations of the Octagon: An Aesthetic-Mathematical Dialectic</b> James Mai		

<b>UB Room 2</b>				<b>Midday 2:00pm – 3:30pm</b>	<b>SESSION 16</b>	<b>Chair: Ergun Akleman</b>
T JUL 30	1	2:00	REG	<b>"In an Ocean of Ashes": Order and Chaos in Mathematics and Literature</b> Katharine Ahrens		
T JUL 30	2	2:30	REG	<b>Ordinal-Contextual Dissimilarity for Analysis of Heroes in Tragedies</b> Bahman Afsari, Katayun Mazdapour and Bruno Jedynak		
T JUL 30	3	3:00	REG	<b>A Theoretical Framework to Represent Narrative Structures for Visual Storytelling</b> Ergun Akleman, Stefano Franchi, Devkan Kaleci, Laura Mandell, Takashi Yamauchi and Derya Akleman		

UB Room 3				Midday 2:00pm – 3:30pm	SESSION 17	Chair: Rachel Hall
T JUL 30	1	2:00	SHRT	<b>Introducing the Möbius-Twisted Turk's Head Knot</b> Carlo H. Séquin and Lorenzo Larrucea		
T JUL 30	2	2:15	SHRT	<b>Hypernom: Mapping VR Headset Orientation to <math>S^3</math></b> Vi Hart, Andrea Hawksley, Henry Segerman and Marc ten Bosch		
T JUL 30	3	2:30	SHRT	<b>Large, Symmetric, "7-Around" Hyperbolic Disks</b> Sean Liu, Young Kim, Raymond Shiau and Carlo H. Séquin		
T JUL 30	4	2:45	SHRT	<b>Infinite Rhythmic Tiling Canons</b> Clifton Callender		
T JUL 30	5	3:00	SHRT	<b>A Musical Scale Generated from the Ratio of Consecutive Primes</b> Reginald Bain		
T JUL 30	6	3:15	SHRT	<b>Programmable Mathe-Musical Boxes</b> Rachel Hall		

UB Room 4-5				Midday 2:00pm – 3:30pm	SESSION 18	Workshop
T JUL 30	Room 4	2:00	WORK	<b>Square Seeds and Round Paths: Exploring Patterns within the Art of Classical Labyrinths</b> David Thompson and Diana Cheng		
T JUL 30	Room 5	2:00	WORK	<b>Hearing Math and Seeing Music: a Workshop on Pitch Perception and Temperament</b> Evelyn Lamb		

UB Room 6				Midday 2:00pm – 3:30pm	OPEN SESSION	Chair: JoAnne Growney
T JUL 30	Room 6	2:00	OPEN	<b>An Open Session in Poetry</b> An informal gathering for poets to read to each other and talk about their work		

**Coffee Break 3:30pm – 4:00pm**

UB Room 1				Afternoon 4:00pm – 5:30pm	SESSION 19	Chair: Darrah Chavey
T JUL 30	1	4:00	REG	<b>Curved Islamic Star Patterns of Medieval Egypt and Syria</b> B Lynn Bodner		
T JUL 30	2	4:30	REG	<b>The Geometric Studies of Some Mosaic Design Compositions and Puzzles ...</b> Reza Sarhangi		
T JUL 30	3	5:00	REG	<b>Double Strip Patterns: Between Strip Patterns and Wallpaper Patterns</b> Darrah Chavey, Monica Menzies Meissen, Todd O'Bryan and Glenn Terry		

<b>UB Room 2</b>				<b>Afternoon 4:00pm – 5:30pm</b>	<b>SESSION 20</b>	<b>Chair: Karl Schaffer</b>
T JUL 30	1	4:00	REG	<b>Nonplanar Expansions of Polyhedral Edges in Platonic and Archimedean Solids</b> David Reimann		
T JUL 30	2	4:30	REG	<b>The Platonic Solids: a Three-Dimensional Textbook</b> Martin Levin		
T JUL 30	3	5:00	REG	<b>A Skeleton Key for the Platonic Solids</b> Karl Schaffer		

<b>UB Room 3</b>				<b>Afternoon 4:00pm – 5:30pm</b>	<b>SESSION 21</b>	<b>Chair: Kazmier Maslanka</b>
T JUL 30	1	4:00	SHRT	<b>The Shapes of Our Souls and Other Student Concerns: Poems about the Course</b> "Mathematics in Literature" Marion Cohen		
T JUL 30	2	4:15	SHRT	<b>Visualizing Rhyme Patterns in Sonnet Sequences</b> Hartmut F. W. Höft		
T JUL 30	3	4:30	SHRT	<b>Inspire Math-Girls-Women (perhaps with poems)</b> Jo Anne Growney		
T JUL 30	4	4:45	SHRT	<b>The Geometric Structure of Scribal Variation among Manuscripts of Langland's Piers Plowman</b> Roger Bilisoly		
T JUL 30	5	5:00	SHRT	<b>Linguistic Oddities: An Artist Explorer at Mathematics Conferences</b> Katie McCallum		
T JUL 30	6	5:15	SHRT	<b>The Paradigm Poem</b> Kazmier Maslanka		

<b>UB Room 4-5</b>				<b>Afternoon 4:00pm – 5:30pm</b>	<b>SESSION 22</b>	<b>Workshop</b>
T JUL 30	Room 4	4:00	WORK	<b>Exploring Ratios and Sequences with Mathematically Layered Beverages</b> Andrea Hawksley		
T JUL 30	Room 5	4:00	WORK	<b>The Shape Snacker: a Bite of Origami and Math</b> Alan Russell		



## Friday July 31

UB Room1				Morning 9:30am – 11:00am	SESSION 23	Chair: Douglas Dunham
F JUL 31	1	9:30	REG	<b>Real-World Tessellations</b> Robert Fathauer		
F JUL 31	2	10:00	REG	<b>Soccer Ball Symmetry</b> David Swart		
F JUL 31	3	10:30	REG	<b>Fractal Wallpaper Patterns</b> Douglas Dunham and John Shier		

UB Room 2				Morning 9:30am – 11:00am	SESSION 24	Chair: Briony Thomas
F JUL 31	1	9:30	REG	<b>Folding Pseudo-Stars that are Cyclicly Hinged</b> Greg Frederickson		
F JUL 31	2	10:00	REG	<b>Yvon-Villarceau Circles Equivalents on Dupin Cyclides</b> Francesco De Comite		
F JUL 31	3	10:30	REG	<b>Nested Polytopes with Non-crystallographic Symmetry induced by Projection</b> Briony Thomas, Reidun Twarock, Motiejus Valiunas and Emilio Zappa		

UB Room 3				Morning 9:30am – 11:00am	SESSION 25	Chair: Samuel Verbiese
F JUL 31	1	9:30	SHRT	<b>Fractal Tiling Illustrations of Geometric Series</b> Lorelei Koss		
F JUL 31	2	9:45	SHRT	<b>A Concept Map for Book 1 of Euclid's Elements</b> Alexander Boxer and Justace Clutter		
F JUL 31	3	10:00	SHRT	<b>Graph Theoretic Descriptions of Psalm Literary Structure</b> Russell Jay Hendel		
F JUL 31	4	10:15	SHRT	<b>A Successful Belgian Art &amp; Math Exhibition with Workshops</b> Gisèle De Meur and Samuel Verbiese		
F JUL 31	5	10:30	SHRT	<b>Geometry in the Pocket</b> Mehrddad Garousi		
F JUL 31	6	10:45	SHRT	<b>Bridges Exhibits as Incentives to Collaborative Artworks</b> Anusch Bayens, Carlo De Pauw, Carmen Geens, Seniz Karaman, Mark Pieters, André Thomas, Alex Van Bogaert, Samuel Verbiese, Rudi Willaert and Nico Willemsens		

UB Room 4-5				Morning 9:30am – 11:00am	SESSION 26	Workshop
F JUL 31	Room 4	9:30	WORK	<b>A Workshop Using the Log Cabin Quilt For Teaching Math Concepts and Patterns</b> Cristina Packard		
F JUL 31	Room 5	9:30	WORK	<b>Use of RangoLee Art in Elementary Mathematics Education</b> Madhuri Bapat		

**Coffee Break 11:00am – 11:30am**

UB Moot Court				Morning 11:30am – 12:30pm	SESSION 27	Chair: Carlo H. Séquin
F JUL 31	1	11:30	PLEN	<b>Math Helping Art Conservation</b> Ingrid Daubechies		

**Coffee and Lunch Break 12:30pm – 2:00pm**

UB Room 3				Midday 2:00pm – 3:30pm	SESSION 28	Chair: Emilio Zappa
F JUL 31	1	2:00	SHRT	<b>An Exhibition of Exponential Sums: Visualizing Supercharacters</b> Paula Burkhardt, Gabriel Currier, Stephan Ramon Garcia, Mathieu de Langis, Bob Lutz, Hong Suh		
F JUL 31	2	2:15	SHRT	<b>Surfaces with Natural Ridges</b> David Brander and Steen Markvorsen		
F JUL 31	3	2:30	SHRT	<b>A New Way to See Inside Black Holes</b> Richard Henry, James Overduin and Kielan Wilcomb		
F JUL 31	4	2:45	SHRT	<b>Katzengold: Pyrite, Plato, and a Polynomial</b> Stephan Klaus and Bianca Violet		
F JUL 31	5	3:00	SHRT	<b>Cayley Cubic and the Visual Arts</b> Jean Constant		
F JUL 31	6	3:15	SHRT	<b>Expandohedra: Modeling Structural Transitions of a Viral Capsid</b> Adam Arstall, Briony Thomas, Reidun Twarock and Emilio Zappa		

**Coffee Break 3:30pm – 4:00pm**

# Bridges Baltimore Family Day

Chair: Kristóf Fenyvesi

<http://www.familyday.hu/>

UB Room 4-7				Midday 2:00pm – 3:15pm	SESSION 29
				Workshop	
F JUL 31	Room 4	2:00-3:15	WORK	<b>Elevations – Stellations</b> Rinus Roelofs, Helen Yu, and Marion Roelofs	
F JUL 31	Room 5	2:00-3:15	WORK	<b>Riddles and Jokes</b> Marion Deutsche Cohen	
F JUL 31	Room 6	2:00-3:15	WORK	<b>Block Workshop</b> John Hiigli	
F JUL 31	Room 7	2:00-3:15	WORK	<b>The Story of the WOW Calendar</b> Doug and Aynn Titchenal	

UB Room 4-7				Afternoon 3:15pm-4:30pm	SESSION 30	Workshop
F JUL 31	Room 4	3:15-4:30	WORK	<b>Spherical models inspired by Fr. Magnus Wenninger</b> Joseph Clinton		
F JUL 31	Room 5	3:15-4:30	WORK	<b>Make Geometric Art with ITSPHUN</b> Mircea Draghicescu		
F JUL 31	Room 6	3:15-4:30	WORK	<b>Make Your Own MP3 with “Algorhythmic” Generation and Aksak–Euclidean Synthesis</b> Mehmet Vurkaç (for this workshop you need to bring your laptop)		
F JUL 31	Room 7	3:15-4:30	WORK	<b>String Art in Mathematical Education</b> Radmila Radojevic, Branislava Jakovljevic		

UB Room 4-6				Late Afternoon 4:30pm– 5:45 pm	SESSION 31
				Workshop	
F JUL 31	Room 4	4:30-5:45	WORK	<b>Experience Workshop Introduces 4Dframe, Jomili and Saxon’s Polyuniverse</b> Kristóf Fenyvesi	
F JUL 31	Room 5	4:30-5:45	WORK	<b>Make Geometric Art with ITSPHUN</b> Mircea Draghicescu	
F JUL 31	Room 6	4:30-5:45	WORK	<b>Imaginary Mathematics</b> Jean Constant, Bianca Violet (for this workshop you need to bring your laptop)	

Moot Hall				Afternoon 2:00pm – 7:00pm
F JUL 31 FD	1	2:00	SHOW	<b>Robert Bosch</b> <i>Bridges 2015 Short Movie Festival</i>
F JUL 31 FD	2	3:30	SHOW	<b>Sarah Glaz</b> <i>Mathematics Poetry Night</i>
F JUL 31 FD	3	5:30	SHOW	<b>Robert Bosch</b> <i>Bridges 2015 Short Movie Festival</i>

The Wright Theater				Afternoon 2:00pm - 9:00pm
F JUL 31 FD	1	2:00	SHOW	<b>Karl Schaffer, Saki, and Laurel Shastri</b> <i>Math and Dance</i>
F JUL 31 FD	2	2:30	SHOW	<b>Tim and Tanya Chartier</b> <i>Mime-Matics</i>
F JUL 31 FD	3	3:30	SHOW	<b>Steve Abbott</b> <i>Mathematical Theater</i>
F JUL 31 FD	4	5:30	SHOW	<b>Karl Schaffer, Saki, and Laurel Shastri</b> <i>Math and Dance</i>
F JUL 31 FD	5	6:00	SHOW	<b>Tim and Tanya Chartier</b> <i>Mime-Matics</i>
F JUL 31 FD	6	7:00	SHOW	<b>Vi Hart</b> <i>Music Night</i>

**The Platonic Solids:** *a Three-Dimensional Textbook* is an exhibit in room 204 at the 2015 Bridges conference that includes over 30 geometric sculptures, depicting the geometric relationships between the five Platonic solids, as well as extensive text explaining and developing those geometric ideas. It is accessible to those with little mathematical background, but those sophisticated in math will likely find some delightful surprises.

## Pythagorean Trio

Dancers Karl Schaffer, Saki, and Laurel Shastri perform a mathematical romp through dance, including combinatoric and rhythmic play with boxes, bottles and vaudevillian hats and a "Dance from the Book". Karl is co-founder with Erik Stern of the Dr. Schaffer and Mr. Stern Dance Ensemble, which has been revealing the surprising connections between mathematics and dance for years through highly physical, engaging choreography peppered with their unique brand of humor and entertaining audience interactions.



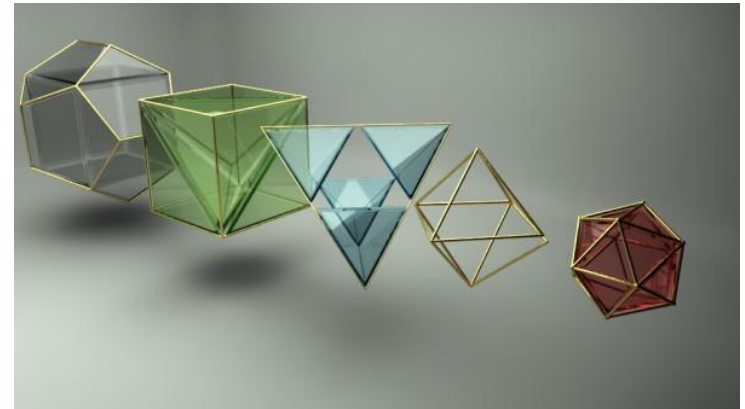
## Mime-Matics

**Tim and Tanya Chartier's mime** combines masks, puppetry, and classical mime illusions into a distinctive style that they have performed throughout the United States and in national and international settings.

The Chartiers have trained at Le Centre du Silence mime school, the Dell'Arte School of International Physical Theater and with the world-renowned mime artist Marcel Marceau.

## Bridges 2015 Short Movie Festival

The 6th Annual Bridges Short Movie Festival will include a variety of juried and curated videos and short films. The program will include movies, videos and animations that have been created for educational, corporate and artistic purposes, and will provide another opportunity for you to experience innovative and integrative techniques in the fields of mathematics and art.



## Saturday August 1, 2015

UB Room 1				Morning 9:30am – 11:00am	SESSION 32	Chair: Christopher Carlson
S AUG 1	1	9:30	REG	<b>Self-Avoiding Random Walks Yielding Labyrinths</b> Gary Greenfield		
S AUG 1	2	10:00	REG	<b>A Novel Line Fractal Pied de Poule (Houndstooth)</b> Loe Feijs and Marina Toeters		
S AUG 1	3	10:30	REG	<b>Algorithmic Quilting</b> Christopher Carlson, Nina Paley, and Theodore Gray		

UB Room 2				Morning 9:30am – 11:00am	SESSION 33 (JMA Session)	Chair: Craig S. Kaplan
S AUG 1	1	9:30	REG	<b>Can zombies write mathematical poetry? Mathematical poetry as a model for humanistic mathematics</b> Gizem Karaali		
S AUG 1	2	10:00	REG	<b>Barbers and big ideas: paradox in math and poetry</b> Alice Major		

UB Room 3				Morning 9:30am – 11:00am	SESSION 34	Chair: Douglas G Burkholder
S AUG 1	1	9:30	SHRT	<b>3D Lenticular Imaging for Art</b> Yitzhak Weissman		
S AUG 1	2	9:45	SHRT	<b>Nature as a Strategy for Pattern Formation in Art</b> Irene Rousseau		
S AUG 1	3	10:00	SHRT	<b>Eight-Pointed Star and Precise Construction of 7x7 Square Grid</b> Dmitri Kozlov		
S AUG 1	4	10:15	SHRT	<b>Algorithms for Morphing Escher-Like Tessellations</b> Kevin Lee		
S AUG 1	5	10:30	SHRT	<b>Random Walks on Vertices of Archimedean Tilings</b> Vincent J. Matsko		
S AUG 1	6	10:45	SHRT	<b>Unexpected Beauty Hidden in Radin-Conway's Pinwheel Tiling</b> Douglas G Burkholder		

<b>UB Room 4-5</b>				<b>Morning 9:30am – 11:00am</b>	<b>SESSION 35</b>	<b>Workshop</b>
S AUG 1	Room 4	9:30	WORK	<b>Unit Origami: Star-Building on Deltahedra</b> Heidi Burgiel		
S AUG 1	Room 5	9:30	WORK	<b>Connecting with the Sierpinski Tetrahedron</b> Alice Petillo		

**Coffee Break 11:00am – 11:30am**

<b>UB Moot Court</b>				<b>Morning 11:30am – 12:30pm</b>	<b>SESSION 36</b>	<b>Chair: Kelly Delp</b>
S AUG 1	1	11:30	PLN	<b>Modular Origami Halftoning: Theme and Variations</b> Zhifu Xiao, Robert Bosch, Craig Kaplan and Robert Lang		

**Lunch Break 12:30pm-2:00pm**

<b>UB Moot Court</b>				<b>Midday 2:00pm – 4:00pm</b>	<b>SESSION 37</b>	<b>Chair: Carlo H. Séquin</b>
S AUG 1	1	2:00	REG	<b>The Concept of Elevation applied to Flat Tiling Patterns</b> Rinus Roelofs		
S AUG 1	2	2:35	REG	<b>Laser-Cut Plywood and Cable-Tie Sculpture</b> George Hart		
S AUG 1	3	3:10	REG	<b>2-Manifold Sculptures</b> Carlo H. Séquin		
S AUG 1	4	3:45	FLM	<b>Bridges Finland 2016</b> Osmo Pekonen and Kristóf Fenyvesi		

**Coffee Break 4:00pm – 4:30pm**