# **Bridges Baltimore Family Day**

Coordinator: Kristóf Fenyvesi Friday July 31, 2015 University of Baltimore John and Frances Angelos Law Center and the Wright Theater 1401 North Charles Street

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

UB Law	/ Building			Afternoon 3:15pm – 4:30pm	Family Day Workshop
F JUL 31	Room 4	3:15	WORK	Spherical models inspired by Fr. Magn Joseph Clinton	us Wenninger
F JUL 31	Room 5	3:15	WORK	Make Geometric Art with ITSPHUN Mircea Draghicescu	
F JUL 31	Room 6	3:15	WORK	Make Your Own MP3 with "Algorhythm Synthesis Mehmet Vurkaç (for this workshop you ne	ic" Generation and Aksak–Euclidean eed to bring your laptop)
F JUL 31	Room 7	3:15	WORK	String Art in Mathematical Education Radmila Radojevic, Branislava Jakovljevic	0

UB Lav	v Building	l		Evening 4:30pm – 5	5:45pm	Family Day Workshop	
F JUL 31	Room 4	4:30	WORK	Experience Workshop	Introduces 4	)frame, Jomili and Saxon's F	Polyuniverse
				Kristóf Fenyvesi			-
F JUL 31	Room 5	4:30	WORK	Make Geometric Art w	ith ITSPHUN		
				Mircea Draghicescu			
F JUL 31	Room 6	4:30	WORK	Imaginary Mathematic	s		
				Jean Constant, Bianca	Violet		
				(for this workshop you r	need to bring yo	ur laptop)	

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

Law Buildi	ng Moo	ot Hall		Afternoon 2:00pm - 7:00pm
F JUL 31 FD	1	2:00	SHOW	Robert Bosch Bridges 2015 Short Movie Festival
F JUL 31 FD	2	3:30	SHOW	Sarah Glaz Mathematics Poetry Afternoon
F JUL 31 FD	3	5:30	SHOW	Robert Bosch Bridges 2015 Short Movie Festival

Law Building R	oom 204	All Day	The Platonic Solids
<i>The Platonic S</i> that includes over well as extensive mathematical back	olids is a <i>Three</i>	<i>-Dimensional Te</i>	<i>Extbook</i> is an exhibit in room 204 at the 2015 Bridges conference
	er 30 geometric	sculptures, dep	picting the geometric relationships between the five Platonic solids, as
	e text explaining	and developing	g those geometric ideas. It is accessible to those with little
	ackground, but th	nose sophistica	ted 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. S and Mr. S, 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.



## **Bridges Baltimore Family Day Workshops**



Elevations – Stellations by Rinus Roelofs, Helen Yu, and Marion Roelofs: Come and construct beautiful geometrical papersculptures!

#### Riddles and Jokes by Marion Deutsche Cohen:

At the mathematical poet and writer Marion Deutsche Cohen's workshop participants can bring in jokes and riddles that have to do with math, in some way. Part of the point is that participants see that math doesn't have to involve numbers – also, math is something that most everyone has done AND ENJOYED (whether or they knew that) – and mainly, math CAN be enjoyed. Block Workshop by John Hiigli: Artist John Arden Hiigli will introduce how his



patented tetrahedral building blocks and the little known block work of inventor Patricia A. Roane (1920-1996) can be used to teach geometric constructions and their transformations.



The Story of the WOW Calendar by Doug and Aynn Titchenal: The Wow Calendar is a mathematically inspired, artistically imagined 365-day calendar, constructed from a centered square and executed in a variety of media. Come

join the fun! All that is required is curiosity.



Spherical Models Inspired by Fr. Magnus Wenninger Workshop by Joseph Clinton: 100 small kits of die-cut paper materials for constructing a 7 inch diameter model of a geodesic

dome will be available. The polyhedron model is inspired by Fr. Magnus Wenninger's book Spherical Models.



String Art in Mathematical Education by Radmila Radojevic and Branislava Jakovljevic: After participants have understood the basics, it will be fun to apply sym-

metry and watch how interesting structures appear.

Make Your Own MP3 with "Algorhythmic" Generation and Aksak–Euclidean Synthesis by Mehmet Vurkaç: The workshop presents rhythm cells and their interactions according to the Afro-Latin framework uncovered by the facilitator. After trying out rhythm segments through clapping, singing, drumming, or using free drum-machine software, participants record their preferences on a worksheet, and receive an MP3 based on their construction in one of several styles (Brazilian, Haitian, funk, Middle Eastern, etc.).

na-<br/>byMake Geometric Art<br/>with ITSPHUN byvicMircea<br/>Draghicescu:vaWe will have a lot of<br/>rti-ITSPHUN<br/>pieces and<br/>invitepieces and<br/>to<br/>play!willplay!Build<br/>mm-your<br/>own<br/>make



Platonic, Archimedean and other solids.

Experience Workshop Introduces 4Dframe, Jomili and Saxon's Polyuniverse by Kristóf Fenyvesi: join us and try the amazing 4Dframe toolkits from



Korea for assembling Fullerene-"soccer balls"; experiment with the Jomili block set from Slovakia to build planar or spatial patterns, pictures or visual illusions; play with the colorful PolyUniverse from Hungary and create your own artistic world.



Imaginary Mathematics by Jean Constant and Bianca Violet: Creative computer&art workshop for youngs and adults interested to hands-on practice of the free, interactive Imaginary's SURFER program. Enter simple equations that produce beautiful images, which are surfaces in space, play around with colors and turn your surface around to see it from all angles. SURFER features a variety of content that can be used in schools, at home, in museums, at exhibitions or for events of all kind. IMAGINARY is a project of the Mathematisches Forschungsinstitut Oberwolfach, Germany and funded by the Klaus Tschira Stiftung.

