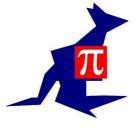
# Math Kangaroo Bulletin



# The bulletin of Math Kangaroo in USA, NFP

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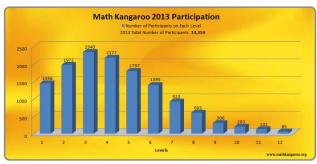
Maria Omelanczuk, CEO

# Happy back to school!

Enrolment for Math Kangaroo 2014 begins with twenty more new Math Kangaroo centers; new schools are still invited to inquire and we are adding centers until December  $1^{st}$ .

Before we invite your students to the next international competition in mathematics, let us take a glance at the past season's highlights.

Math Kangaroo 2013 took place in 300 classrooms across 37 US states. 13,000 students from grads 1-12 registered. Each of them still cherishes a yellow t-shirt, a little kangaroo toy and a participation diploma. This was also the second year that we sent full solutions of the competition questions to all participants.





More metrics...

Several of Math Kangaroo participants continue with mathematical studies at colleges and universities. Today we are also presenting Dr. K. Ostaszewski, who invites our students to the lucrative profession of actuary.

Following the professor's story are messages from our outstanding participants who were recognized for their results and also contributed to the recent success of our venture. Our officers talk with the students who have been with us for several years and present young artists who have used their talent for promoting Math Kangaroo.

We hope that you like our bulletin and continue your support. See you all on Math Kangaroo Day, Thursday, March 20, 2014!



Dr. Krzysztof Ostaszewski, FSA, CERA, FSAS, CFA, MAAA Professor of Mathematics, Actuarial Program Director Illinois State University, Center of Actuarial Excellence

I am the Actuarial Program Director at Illinois State University (ISU) and would like to introduce myself to you, and to ask you to introduce our program to your students. Information about the program is posted at <a href="http://www.IllinoisState.edu/actuary">http://www.IllinoisState.edu/actuary</a>.

Information about the actuarial profession can be found at <a href="www.BeAnActuary.org">www.BeAnActuary.org</a>.

The actuarial profession is well respected, highly compensated, and often considered the best job in America. I ask you to encourage your students to consider this field and the Actuarial Program at Illinois State University. We are one of very few universities in the world designated as the Center of Actuarial Excellence (CAE) by the Society of Actuaries. We were among the first nine universities in the United States to receive that designation in December 2009, and the first one in the state of Illinois.

Let me point out that we have a number of scholarship opportunities for actuarial students, funded by the State Farm Foundation, Country Financial, Zurich Insurance, American Family Insurance, Pinnacle Actuarial Resources, and other sources. We are located just next door to State Farm, one of the largest insurance companies in the world. We also run a summer program in actuarial science for minority high school students, which you can learn more about http://business.illinoisstate.edu/katie/outreach/minority.shtml and a program for all high school students: http://business.illinoisstate.edu/katie/outreach/risk/

Please be kind to let your students know of these great opportunities.

In the Fall of 2013, October 7 in Bloomington/Normal and October 7 in Chicago, we will hold special Actuarial Career Fairs for high school students. You can find information about it and other events we organize at: <a href="http://www.math.ilstu.edu/actuary/events.html">http://www.math.ilstu.edu/actuary/events.html</a>.

If I can ever visit your school to tell you about the actuarial career and about our program, please be kind to contact me, and I would be very happy to visit. You can contact me, or my assistant, Susan Mitchell (tel. 309-438-7797, e-mail: <a href="mailto:smitche@ilstu.edu">smitche@ilstu.edu</a>).



Magdalena Teodorowicz, Office Manager

Mathematical camps and iPads were among the greatest awards in Math Kangaroo 2013.

The following students were awarded with Wolfram Mathematica Camp at Bentley University in Massachusetts in July.

First Name	Middle Name	Last Name	Level	City	State
DAVID	WALTER	STONER	10	COLUMBIA	SC
YIFAN		HONG	10	LIVERMORE	CA
SHELDON		ZHU	10	SOUTH PASADENA	CA
KA WAI		LEE	10	AURORA	IL

Article about the camp...

The following students were awarded with the International Math Kangaroo Camp in Zakopane, Poland in August.

First Name	Middle Name	Last Name	Level	City	State
ALEC	XIAOQIU	SUN	9	LEXINGTON	MA
TIMOTHY	FERGUS LIM	NGOTIAOCO	9	BELMONT	CA
RORY	SMITH	SOIFFER	9	HILLSBORO	OR
EMILY	CATHERINE	JIA	9	HOFFMAN ESTATES	IL
TIMOTHY	EDWARD	GIESEKING	9	SUWANEE	GA
SARAH	RACHEL	SILCOX	11	OGDEN	UT
STEVEN		BAN	11	OGDEN	UT

Photos from Zakopane...

The following students were awarded with iPads.

First Name	Middle Name	Last Name	Level	City	State
KASPER		KUBICA	12	OGDEN	UT
DANIEL	W	CHEN	12	LAWRENCE	KS
PATRYK	GUSTAW	LIPSKI	12	CHICAGO	IL
REBECCA	R	NICKERSON	12	OGDEN	UT
ТОМЕК		GRUDZINSKI	12	CHICAGO	IL

The list of all awards can be found on 2013 Awards page.

# MEMORIES from 12 Days Mathematica - Wolfram Research Camp at Bentley University in Massachusetts



Ka Wai Lee, IL

Mathematica Summer Camp was truly a great experience.

Heavily programming-based, the camp taught me not only how to program in Mathematica, but also how to think in the mindset as a programmer. Some of the greatest memories from Mathematica camp were the times when we had the chance to play with various technology, including innovative software and hardware.



Yifan Hong, CA

This year, the camp was hosted at Bentley University in Boston. Each person slept in a dorm with another person. Every day, our schedule was:

- 1) Breakfast
- 2) Mathematica workshop
- 3) Project time
- 4) Lunch
- 5) Seminar
- 6) Project time
- 7) Group activity
- 8) Dinner
- 9) Guest speaker
- 10) Free time

The instructors were very supportive and were glad to help even the utter-most beginners. I myself had no experience so I appreciated all they did for me. We had lectures on probability and how to integrate it in Mathematica. We also

had lectures from Stephen Wolfram, the creator of the program. He told us how he came to name Mathematica and how he grew up as a kid. I have learned a copious amount of coding in graphics 3D, for instance my project on Star Collapse.

I would definitely recommend this camp to my friends and I would be delighted to attend it next year.



David Stoner, SC

When I put on my bright yellow Math Kangaroo t-shirt and headed to the airport on July 7<sup>th</sup>, I had no idea what awaited me at Bentley in Massachusetts. Traveling to Mathematica Summer Camp brought thoughts of expectation...and hopes for some new friendships and perhaps a few good games of chess.

of The exceeded all camp expectations. The setting and facilities were well

suited for a camp of this nature. The faculty was fun and engaging, and the collection of assembled "campers" from as far away as Korea, proved to be great students and colleagues.

My hopes for a few games of chess were well satisfied. As part of the camp, students take the knowledge learned about Mathematica and create a personal project. I enjoy chess and decided to take the game to three dimensions. A summary of my project can be viewed here: http://demonstrations.wolfram.com/3DChess/. If you have Mathematica, you can even play!

There were also opportunities for fun exploration outside of class time. The picture below shows my team on a scavenger hunt. We also took trips to the Museum of Science and the deCordova Sculpture Park. The museum was particularly exciting with many hands-on exhibits including the opportunity to make a model of a carbon nanotube.

Overall, Mathematica Summer Camp was a wonderful experience!

Thank you to Math Kangaroo for this awesome opportunity.







# MEMORIES from 10-days Math Kangaroo International Math Camp at Zakopane, Poland

Math Kangaroo wasn't kidding when they said I would embark on the best vacation of my life. From the picturesque historical square to the breathtaking views on the mountains, every moment was filled with beauty and learning. Our housing left nothing to be wanted, and we feasted on homemade Polish meals in a grand dining hall- every day. The mathematical lectures were thoroughly taught by passionate teachers. Well-planned activities made sure there was never a dull moment, and the people I met really made the camp phenomenal! Magdalena and Bogdan were always up for showing us more of Zakopane and Polish culture, even outside of our scheduled escapades. I could talk to them about anything, and they would help with even the smallest requests. The other members of Team USA were incredibly intelligent and approachable also. We grew very close; I still miss everyone now! Interacting with students and cultures from many other countries was another unique experience that only Math Kangaroo could offer. Poland is perfect, and I am so glad that I attended Zakopane 2013. My greatest regret is that I can't go again!



MEMORIES from 10-days Math Kangaroo Int'l Math Camp at Zakopane, Polan





**Emily Jia** 

Level 9, IL

Math Kangaroo in Poland was a fabulous blend of food, fun, and friends. The Polish cuisine wasn't elaborate, but it was both delicious and nourishing. The mathletes from other countries were brilliant, nice, and eager to interact.

Hiking to see gorgeous lakes and valleys everyday was especially exciting. I'd advise anyone who has been invited to attend.

Zakopane was definitely a worthwhile experience.





Sarah Silcox Level 11, UT



High School students who were awarded with a 10-days International Math Kangaroo Camp in Zakopane.



In the Valley of Five Polish Ponds.
From the left: Steven Ben, Sarah Silcox, Emily Jia, Timothy Gieseking, Rory Soiffer, and Timothy Ngotiaoco.

I really enjoyed going on the Poland trip. It's totally different seeing a country much older than your own. I was amazed at all the history we found in Poland and it was fun learning a bit of Polish. I loved the food in Poland and I enjoyed viewing the various tourist spots in Krakow and Zakopane. In Zakopane, I had fun meeting people from all over Europe and doing math with them. It really shows that while we may have different languages, we can all unite under an international language like math. Despite the fact that we spoke various tongues, I was able to meet so many people and enjoyed lots of games with them. If I could, I would definitely go to this camp again.



MEMORIES from 10-days Math Kangaroo Int'l Math Camp at Zakopane, Polanc





Timothy Ngotiaoco Level 9, CA

I had an amazing experience at the Zakopane camp! Poland is a very scenic country, and the cities are bubbling with excitement. Although the hikes up the mountains were truly demanding, and all you could see were miles of rocks and rocks and more rocks, the top of the mountain was very rewarding. I had a blast going down the gravity slide with everyone, and ramming into people made it more fun!:)

Also, I was able to meet a lot of different people from different countries. I enjoyed competing in math with them, as well as playing Mafia and card games. Despite the fact that only a few of them could speak fluent English, we still could communicate through games that we all knew how to play. Finally, I want to praise Magda and Bogdan for their care. Every time something went wrong, such as a person losing their phone and wallet on the bus, they would figure out how to get it back. Also, they took us on exhilarating trips in Krakow as well before the camp.

I'm really looking forward to going to Poland again sometime in the future. I am so lucky to be able to go the camp and have such a wonderful experience.



MEMORIES from 10-days Math Kangaroo Int'l Math Camp at Zakopane, Polar





Alec Sun

Level 9, MA



 $\label{eq:conditional} \mbox{Closing Ceremony.} \\ \mbox{Our group from the U.S. won the numerous awards.} \\$ 



Barbecue. They had a good time at the camp!

The Math Kangaroo summer camp is not a generic summer math camp. Not only do we get the opportunity to learn

from some of the most respected
mathematicians from Europe, but we are also
able to explore Poland's natural beauty
through the frequent hikes into the Polish
Tatra mountains.

The students are invited from countries around Europe, and although we may speak many different languages, we connected through our love of mathematics.

Thank you Math Kangaroo for this once-ina-lifetime opportunity.





Steven Ban

Level 11, UT



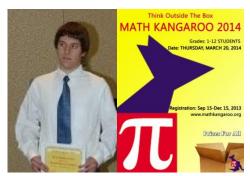
## **Math Kangaroo 2014 Poster Contest**



#### Joanna Lasek-Matthiesen, CIO

Thank you so much to those who took time to create the Math Kangaroo 2014 poster. There were many notable works of art that so creatively disseminated the spirit of Math Kangaroo's ongoing mission to help kids love mathematics. It is great to know that our contest was popular among children as well as adults!

The choice of the overall winner was not easy. After much deliberation, the award for Best Poster 2014 went to Przemek. Here what he says about himself: My name is Przemek and I moved to Illinois two years ago. Now I live and go to high school in Aurora. My favorite subject at school is history. My mom was the first person who told me about Math Kangaroo. I wanted to get involved some way but I am better at designing than at math. After thinking about what I can do to contribute to Math Kangaroo I realized that I can make a nice flyer with my computer graphic skills so it will advertise this contest for next year.



Przemek, Level 12, Aurora, IL

Congratulations to Przemek for his winning entry. He received \$250 Amazon gift card and a Math Kangaroo 2014 Best Poster diploma. Also a big THANK YOU to all participants who submitted poster entries this year. We thank both students and adults for their efforts, specifically: Anika, Arjun, David, Katelyn, Keona, Keshav, Kristen, Michal, Parv, Pawel, Peter, Phoebe, Przemek, Pujita, Rojin, Sana, and Tracey. Please look at samples of their creative work here: 2014 POSTER ENTRIES.

This year's winning design poster will be used to promote the 17<sup>th</sup> Annual Math Kangaroo Competition to take place on March 20, 2014. Watch for flyers featuring Przemek's poster and check our website for the 2015 Math Kangaroo Poster Contest.

Eight years old Karissa Jaskolka was recognized for her narration in <u>Math Kangaroo 2013</u> Summary video.



Karissa Jaskolka, Chicago, IL



Izabela Szpiech, CFO

The summer is over and the new school year has started.

16 of this year's Math Kangaroo participants have just become freshmen at colleges and universities.

Most of them chose to pursue a career in math and science fields. Some of this year's high school senior students took Math Kangaroo test several times starting in their early elementary years, and since then they were with us every year.

What kept them consistently coming every March to the testing facility?

Here is what **Arjun Manimaran** from Santa Clara, CA shared with us:

"Math Kangaroo was a great experience. It was a fun and competitive way for me to keep in touch with problem solving. Many of the questions were very tricky, and required creative solutions. This just made them much more satisfying when I figured them out. After participating in the contest for so long, one thing I really love about it is the consistency. The problems are set at a similar difficulty each year. In the past few years, even leading math contests like the AMC are not very well balanced in terms of difficulty with previous years, and so I really do appreciate that. Overall, the contest was a fun and enriching experience. In the near future, I will begin attending Carnegie Mellon University, where I will pursue a degree in Statistics."



#### And Rebecca Nickerson from Ogden, UT wrote:

"I started participating in Math Kangaroo in 5th grade, and I have always enjoyed it. I'm glad that I have taken part in the competition every year - it has given me the chance to experience new and unique opportunities, such as the Math Camp in Poland that I was invited to through Math Kangaroo in 2011. I would recommend the test to others, as I have had fun taking part in the competition, and participating is a good way to challenge oneself to do well in competitive math. I will be attending Yale University in the fall."



Congratulations to all 2013 Math Kangaroo graduates. I wish you very successful studies at your universities and colleges.

Thank you for being with us throughout the years!



Magdalena Teodorowicz, Office Manager

Next Math Kangaroo Day: Thursday, March 20, 2014

(Guam: Friday, March 21)

Registration takes place on <a href="www.mathkangaroo.org">www.mathkangaroo.org</a> from September 22 to December 15, 2013 – subject to place availability. Register early because places fill up quickly.

**Schools are welcome** to join us until **December 1**. If interested, send e-mail to info@mathkangaroo.org

Plenty of free practice material can be found in <u>Practice Materials</u> section on our web page.



## We would like to thank our friends and promoters.







































□ informator polonijny















Please contact us at <u>info@mathkangaroo.org</u> if you or your organization are interested in supporting our endeavor.

Our address:

MATH KANGAROO in USA, Nfp P.O.BOX 472 LISLE, IL 60532 Payments only:

MATH KANGARÓO in USA, Nfp P.O. BOX 56353 CHICAGO, IL 60656

www.mathkangaroo.org • info@mathkangaroo.org

**Earlier bulletins**