

5th CREATIVE MATHEMATICAL SCIENCES COMMUNICATION (CMSC)
ONLINE EVENT on JULY 3, 2020 with follow-up JULY 2021

(<https://cmsc.wmi.amu.edu.pl/>)

**** REGISTER NOW for the CMSC ONLINE EVENT (FREE, but must register). ****

CMSC aims to explore new ways of communicating the rich mathematics, algorithmics, and open problems underlying computer science, using music, dance, theatre, and activities like Computer Science Unplugged and other innovative efforts.

The full 5th CMSC 2020 has been postponed until 2 – 6 July 2021. In order to feel the spirit of CMSC, a short ONLINE EVENT is planned for 3 July 2020.

**** ONLINE EVENT July 3, 2020. ****

Invited speakers will give presentations of no more than 15 minutes, each. The presentations can be considered as trailers or teasers of full presentations to be given at CMSC 2021. There will be an opportunity for Q&A discussion. We look forward to a friendly, enjoyable sharing of ideas and the stimulation of imaginative new ideas in the remote style we are now, at least for a while, adapting to.

**** HERE ARE THE PRESENTERS ****

- Katarina Cheng, winner in the Performance category. Cheng will use dance to present dihedral groups.
- Rohan Jha, winner in the Writing category. Jha will present elliptic curve cryptography. Cheng and Jha are winners of the MoMath (Museum of Mathematics in NYC) International Steven H. Strogatz award recognizing high-school students for math communication projects. (<https://momath.org/strogatz-prize-2020-winners/>)
- Bruce Mufata (Congo) will talk about “Build with Mathematics” which promotes mathematical culture by organizing innovative activities in Kinshasa-D.R.CONGO.
- Judith Gal-Ezer (Open Univ of Israel) is the Mayor of Poznan Scientific Visitor to the City. Gal-Ezer is an expert in the teaching of computer-integrated mathematics and computer science education.
- Tim Bell (Univ Canterbury, NZ) is a leader of the CS Unplugged project and a co-author of the interactive CS Field Guide (www.csunplugged.org).
- Mike Fellows (Univ Bergen, Norway) is a co-author of Computer Science Unplugged and a founder of the research area Parameterized Complexity.
- Andreas Daniel Matt is Managing Director of IMAGINARY (IMAGINARY was initiated at the Mathematisches Forschungsinstitut Oberwolfach (MFO), a member of the Leibniz Association). Matt will present the Artificial Intelligence exhibit: www.i-am.ai <<https://www.i-am.ai/>>. The exhibit examines questions like: How does a neural network learn? Why is a computer able to recognize the numbers I write? Can artificial

intelligence be wrong sometimes? What are training data sets? Is it possible to perform a task without understanding it?

- Karl Schaffer and Erik Stern are the founders of the Dr. Schaffer and Mr. Stern Dance Ensemble, world-famous for its performances and workshops on math dance. They promote whole body math and movement activities for the K-12 classroom that unifies concepts in both mathematics and dance <<http://schafferstern.org>>.
- Pawel Perekietka and Michael Ren (Adam Mickiewicz Univ) will discuss the Polish mathematicians who broke the Enigma during WWII and gave the methods to UK, and will describe the International Codebreakers contest (www.thecodebreakers.org).
- Jerzy Pogonowski (Adam Mickiewicz Univ, Poland) is professor of logic and computer science.
- The Poznan Music Academy with Maciej Grzeskowiak has developed courses that teach computer science together with music. We will be treated to a (part) of the premiere of their new algorithmic music piece, prepared by CS+math+music students.

DATE: July 3, 2020.

TIME: Friday, 8AM – 11 AM (Poznan, Poland), Friday 4PM – 7 PM (Sydney, Australia), Friday 2 AM – 5 AM (Washington, DC), Thursday 11 PM (Vancouver, Canada).

REGISTRATION: Please register in order to receive an online invitation. In order to register, fill out the registration form at the CMSC website:

<https://cmsc.wmi.amu.edu.pl/online-event-at-july-3-2020/>

If you have already registered by email, you do not need to register again.



Karl Schaffer- Erik Stern Tim Bell & CS Unplugged Poznan Academy of Music



Build With Mathematics