

# VIRTUAL UAL MATHEMATICS - COMPUTER SCIENCE FILM FESTIVAL

March 14 | 15 | 22 | 29, 2021

Sunday, March 14, 6 p.m. GMT+1  
*Math Circles Around the World*

Monday, March 15, 8 p.m. GMT+1  
*Hacking for the Commons*

Monday, March 22, 8 p.m. GMT+1  
*Man Ray and the Shakespearian Equations*

Monday, March 29, 8 p.m. GMT+2  
*Secrets of the Surface –  
The Mathematical Vision of Maryam Mirzakhani*

Registration at: [heidelberg-mains.org](https://heidelberg-mains.org)

## Descriptions of the films

Sunday, March 14, 6 p.m. GMT+1

### **MATH CIRCLES AROUND THE WORLD**

Germany 2020, Director: Ekaterina Eremenko, 45 Minutes, English version

Director will be present.

Ekaterina Eremenko, the film's director, was born in Moscow into a family of engineers and scientists, and even as a child she was impressed by the beauty of mathematics. She studied mathematics at Lomonossov University in Moscow and received her degree at the age of 23. She took a break from working towards her PhD after her mother tragically died in a car accident. She spent some time modeling, got into "Vogue" and worked as a television presenter and actress. Eremenko then completed a second degree in film directing and went on to write and direct various films for leading European television channels such as ARTE, BBC and ZDF. She finally returned to her first love, mathematics – only this time to make films about it. She is currently working at the CRC "Discretization in Geometry and Dynamics" and this film was produced as part of their communication and presentation efforts.

Participants include members of Berkeley Math Circle, Math Circle at TU Berlin/Mathematische Schülersgesellschaft "Leonard Euler," We Solve Problems (UK), Moscow Center for Continuous Mathematical Education.

Monday, March 15, 8 p.m. GMT+1

### **HACKING FOR THE COMMONS**

France 2019, Director: Philippe Borrel, 87 Minutes, English version

Director will be present.

Special guest: Steffen Haschler (Computer science teacher in Heidelberg and Open Source advocate)

Digitalization, computing and software are prevalent in most areas of life. At times they are clearly visible and sometimes they are hidden in the complex inner-workings of modern devices and automation. We carry powerful computing machines in our pockets and utilize the possibilities provided by the internet in countless circumstances. Has this given us more freedom, agency and autonomy? Or has this transformed us into passive consumers, entirely at the mercy of the free market? These two opposing views are not new, but have been debated since the 1980s with the advent of the Free Software movement. Around the world, something fundamental is at stake in this discussion: the possibility of using such technology for the common good rather than for to benefit a select few.

Monday, March 22, 8 p.m. GMT+1

### **MAN RAY AND THE SHAKESPEARIAN EQUATIONS**

France 2019, Director: Quentin Lazzarotto, 69 Minutes, French version with English subtitles

Director will be present.

In Paris in the 1930s, the surrealist artist Man Ray discovered peculiar geometrical structures in a forgotten closet at the Sorbonne. These models, shaped by science, inspired the artist to create astonishing photography and paintings that carried Man Ray and his camera into a world between reality and abstraction.

Man Ray's work and the "Shakespearean Equations" are dissected by mathematicians, artists, actors and historians, each offering a unique interpretation: scientific or quirky, amusing or illuminating, tangible or poetic. These insights, coupled with strong images and moments of grace, allow the viewer to discover a different, irreverent, funny and refreshing interaction between science, art and theater.

Monday, March 29, 8 p.m. GMT+2

### **SECRETS OF THE SURFACE – THE MATHEMATICAL VISION OF MARYAM MIRZAKHANI**

USA 2020, Director: George Csicsery, 59 Minutes, English version

Director will be present.

Special guest: Dr. Beatrice Pozzetti, Junior Professor in Mathematics at Heidelberg University

Maryam Mirzakhani was the first and is still the only woman to be awarded one of the highest honors in mathematics, the Fields Medal. Mirzakhani was honored in 2014 for her "outstanding contributions to the dynamics and geometry of Riemann surfaces and their moduli spaces." Tragically, she died just three years later at the age of 40.

Filmed in Canada, Iran and the U.S., "Secrets of the Surface – The Mathematical Vision of Maryam Mirzakhani" charts the life and mathematical work of the Iranian woman who emigrated to the U.S. and became a superstar in her field. Mirzakhani's work is explained in the film by leading mathematicians and illustrated with vivid animations. Her colleagues from around the world, former teachers and classmates, and current Iranian students provide profound insights on her achievements. Her educational journey, success on the Iranian team for the Mathematics Olympiad, and brilliant work make Mirzakhani an inspiration and role model for young female mathematicians as well as mathematicians around the world.