

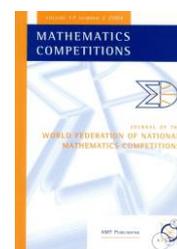


**Report by WFNMC President Alexander Soifer
to the General Assembly
of the International Commission on Mathematical Instruction (ICMI)
of the International Mathematical Union (IMU)**

Hamburg, Germany, July 24, 2016

Publications of the Federation

Ever since 2004 the Editor of our biannual *Mathematics Competitions* journal has been Jaroslav Svrček of Czech Republic. As the editor and publisher of a journal myself, I can appreciate a great job Jaroslav has been doing.



Awards of the Federation

In 1991, Peter O'Halloran introduced two international awards of the Federation: The David Hilbert Award and Paul Erdős Award, for mathematicians prominent on an international or national scale in mathematical enrichment activities. Both Hilbert and Erdős were mathematicians of genius, but two awards could have inspired unintended interpretations of one award being higher than another. Thus, kept just one award, Paul Erdős', as the person of our time, whom some of us knew well. After 1996, the Federation presents up to four Paul Erdős awards at Congresses of the Federation and at ICME's.

Paul Erdős actually attended the 2nd Congress of the Federation in 2004 in Pravetz, Bulgaria.



Math on Excursion: Jaroslav Svrček (left), Paul Erdős, and Josef Molnar,
2nd WFNMC Congress, Pravetz, Bulgaria, 1994



Even dinner cannot stop Math: Paul Erdős, Alexander Soifer, and Kiril Bankov,
2nd WFNMC Congress, Pravetz, Bulgaria, 1994

Congresses of the Federation

Starting in 1990, the Federation holds its International Congress. I have already mentioned several of them above. Let me list all of them here, so that you can see their amazing geography:

- WFNMC-1: Waterloo, Canada (1990)
- WFNMC-2: Pravets, Bulgaria (1994)
- WFNMC-3: ZhongShan, China (1998)
- WFNMC-4: Melbourne, Australia (2002)
- WFNMC-5: Cambridge, UK (2006)
- WFNMC-6: Riga, Latvia (2010)
- WFNMC-7: Barranquilla, Colombia (2014)
- WFNMC-8: Alba Iulia, Romania (2018)

7th WFNMC Congress, Barranquilla, Colombia, 2014

In 2014 Maria Falk de Losada organized the 7th Congress in Barranquilla, Colombia.



Past President Maria Falk de Losada and Senator Ricardo Losada, Canberra, 2000

The Congress featured the Opening Keynote Address “*Computers and Mathematics: Problems and Prospects*” by the world-renown mathematician and inspiring speaker Ronald L. Graham. The following Plenary Talks were given:

- “*The organization of the International Mathematical Olympiad - IMO with particular emphasis on IMO 2013*” by Maria Falk de Losada (Colombia);
- “*A Few Thoughts on the Putnam*” by Mark Krusemeyer USA);
- “*Math Olympiads for the Public Schools in Brazil II*” by Michel Spira (Brazil);
- “*Is there an impact of mathematical competitions on the development of mathematical research? The Romanian experience*” by Radu Gologan (Romania);
- “*A Paper about Pentagon Problems*” by Robert Geretschläger (Austria).

The Closing Address “*Predicting the Future: Four Classic Conjectures of Mathematics*” was presented by Alexander Soifer.

The Congress included many other talks, workshops, and exhibits. A tour of colorful Cartagena served as an icing on this delicious Congress. The following few photos may enliven your perception of the event.



The Russians are coming: Sergei Dorichenko (left) and Nikolai Konstantinov, Barranquilla.



Opening and Closing Speakers: Ronald L. Graham (right) & Alexander Soifer



Colorful Cartagena welcomes you!

Mini Conference of WFNMC, July 23, 2016, Hamburg

This is the third Mini Conference of WFNMC, logistically organized and funded by Maria Falk de Losada. The academic program was produced by Kiril Bankov and Alexander Soifer

Time	Author	Title
9:00 am	Alexander Soifer, USA	The Colorado Mathematical Olympiad at 33
9:50 am	Jaroslav Svrcek, Czech Republic	Five years of the CZE-POL-SVK junior MO
10:10 am	Robert Geretschläger, Germany	Problems on numbers with interesting digits (from the “Mathematical Duel” Bílovec – Chorzów – Graz – Přerov)
10:30 am	Romualdas Kašuba, Lithuania	Several numbers in one place or table – that might be interesting
10:50 am	Coffee Brake	
11:20 am	Petar Kenderov, Bulgaria	The online mathematical competition “Theme of the month”
11:40 am	Omar Colón-Reyes & Luis Cáceres, Puerto Rico	The Problem of the Week: a Successful Online Training Experience for Math Olympiad
12:00 pm	Sergey Dorichenko, Russia	Tournament of Towns and Kvantik magazine
12:20 pm	Lunch	
1:30 pm	María Falk de Losada, Colombia	Foundations of mathematics education as related to competitions

1:50 pm	Gabriela Gómez Pasquali, Paraguay	Impact of the Mathematic Olympiads in the Improvement of Mathematics Education in Paraguay
2:10 pm	Margo Kondratieva, Canada	Do teachers change when observing their students participating in a mathematics
2:30 pm	Coffee Brake	
3:00 pm	Iliana Tsvetkova, Bulgaria	Preparation of 5-7 grade students for mathematics competitions: area problems
3:20 pm	Henk van der Kooij, The Netherlands	International mathematical modeling challenge (IMMC)
3:40 pm	Ali Rejali, Iran	Team Competitions versus Individualism at Mathematics Houses in Iran
4:00 pm	Adjourn	

13th ICME Hamburg 2016, TSG 30: Mathematical Competitions

This Topic Study Group, organized by Maria Falk de Losada and Alexander Soifer, centers around talks and their discussions, including four plenary talks.

July 26, Tuesday, 12:00 – 1:30

Plenary Talk Alexander Soifer (USA): Beyond *Lăozi*: The Goals of Mathematics Instruction.

1:10 Iliana Ivanova Tsvetkova (Bulgaria): Mathematics Competitions as a Tool for Development of Gifted Students.

July 27, Wednesday, 12:00 – 1:30

Plenary Talk María Falk De Losada (Colombia): Are Mathematics Competitions Changing the Way Mathematics Is Being Done and the Mathematics that Is Being Done?

1:10 Chen Donglin and Frederick K.S. Leung (Hong Kong, China): China Mathematical Olympiad School: A Case Study.

July 29, Friday, 12:00 – 1:30

Plenary Talk Peter J. Taylor (Australia): Some Reflections, some Suggestions.

1:10 Luis F. Caceres Duque, Jose H. Nieto Said, and Rafael Sanchez Lamonedá (Puerto Rico, USA): The Mathematical Olympiad of Central America and The Caribbean: 17 Years Supporting Math Contests in the Region.

July 30, Saturday, 12:00 – 1:30

Plenary Talk Kiril Bankov (Bulgaria): Numbers on a Circle

1:10 Borislav Yordanov Lazarov and Albena Vassileva (Bulgaria): Age Factor in Performance on a Competition Paper

The State of the Federation: Summing Up

Through the 32 years, the Federation has expanded its interests, publications, and activities. It was the 4th organization to become an Affiliate of ICMI of the International Mathematics Union (IMU). The 9th Congress of the Federation will take place in 2018 in Alba Iulia, Romania, following the International Mathematical Olympiad (IMO) at the same location.

The Federation is 2⁵ years old. I hope it will reach the age of the power of 2 again. And again. We shall see whether it does! ■