Under the Auspices of
H.E. the President of the Hellenic Republic
Mr. Prokopios Pavlopoulos

First Congress of Greek Mathematicians
FCGM–2018

June 25 – 30, 2018

Athens, Greece

Hellenic Mathematical Society (HMS)

First Congress of Greek Mathematicians
Program

Plenary Talks

Monday, June 25, 2018

09:00 – 11:00 *Reception and Opening Ceremony*
11:00 – 11:30 *Coffee Break*
11:30 – 12:20 **Athanasios Fokas**

From the Wiener-Hopf technique to the Lindelöf Hypothesis
12:30 – 13:20 **Demetrios Christodoulou**

*Geometric Analysis in the Development of Shocks
in Compressible Fluids*
14:30 – 16:00 *Break*
16:00 – 18:30 **Parallel Sessions**

ANAL, DIFFEQ, H&PH, NT, TOP
19:00 – 19:50 **Thaleia Zariphopoulou**

Stochastic partial differential equations and risk management
20:00 – 20:50 **Mihalis Dafermos**

The mathematics of black holes

Tuesday, June 26, 2018

09:00 – 11:00 **Parallel Sessions**

AN, DIFFEQ, GEOM, PROB-STAT, TOP
11:00 – 11:30 *Coffee Break*
11:30 – 12:20 **George Papanicolaou**

Imaging with correlations
12:30 – 13:20 **Constantinos Daskalakis**

From von Neumann's Minimax Theorem to Generating Beautiful Images
13:30 – 14:20 **Loukas Grafakos**

*A short glimpse of the giant footprint of Fourier Analysis
and recent multilinear advances*
14:30 – 16:00 *Break*
16:00 – 18:30 **Parallel Sessions**

ANAL, DIFFEQ, GEOM, M-FIN
18:30 – 19:00 *Coffee Break*
19:00 – 20:50 **Round Table**

*The leakage of Greek scientific potential in the years of the crisis.
Which factors could help to its containment?*
V. Dougalis (NKUA, Coordinator), C. Daskalakis (MIT)
G. Papanicolaou (Stanford), I. Sakellaridis (Rutgers)
Representatives of the Greek Ministry of Education,
the Bank of Greece and the National Bank of Greece

Wednesday, June 27, 2018

09:00 – 11:00	**Parallel Sessions** ALG-COMB, ANAL, DIFFEQ, LFM, M-EDU, NA&SC
11:00 – 11:30	*Coffee Break*
11:30 – 12:20	**Alexander Kechris** *Dynamics of non-archimedean groups, logic and Ramsey theory*
12:30 – 13:20	**Stavros Garoufalidis** *Classical and quantum topology*
13:30 – 14:20	**Maryanthe Malliaris** *Model theory and ultraproducts*
14:30 – 16:00	*Break*
16:00 – 18:30	**Parallel Sessions** ALG-COMB, ANAL, DIFFEQ, GEOM, LFM, M-EDU, NA&SC
18:30 – 19:00	*Coffee Break*
19:00 – 19:50	**Spyridon Argyros** *The space $\mathcal{L}(\mathfrak{X})$ for certain Banach spaces*
20:00 – 20:50	**Phokion Kolaitis** *Logic, Constraint Satisfaction, and Quantum Information*

Thursday, June 27, 2018

09:00 – 11:00	**Parallel Sessions** ALG-COMB, ANAL, DIFFEQ, LFM, M-EDU, NA&SC
11:00 – 11:30	*Coffee Break*
11:30 – 12:20	**Charalambos Makridakis** *Mathematics of Computational Modelling: the challenge of computing nonlinear phenomena*
12:30 – 13:20	**Panagiota Daskalopoulou** *Ancient solutions to Geometric Flows*
13:30 – 14:20	**Nicos Kapouleas** *Recent gluing constructions in Geometry and the gluing methodology*
14:30 – 16:00	*Break*
16:00 – 18:30	**Parallel Sessions** ALG-COMB, ANAL, DIFFEQ, NA&SC, PROB-STAT
18:30 – 19:00	*Coffee Break*
19:00 – 19:50	**Georges Skandalis** *Lie groupoids and index theory*
20:00 – 20:50	**George Pappas** *Shimura varieties over the integers*

Friday, June 29, 2018

09:00 – 11:00 **Parallel Sessions**
ALG-COMB, ANAL, M-PHYS, PROB-STAT

11:00 – 11:30 *Coffee Break*

11:30 – 12:20 **Harry Tamvakis**

Theta polynomials in geometry, Lie theory, and combinatorics

12:30 – 13:20 **Antonis Melas**

Sharp estimates for dyadic type maximal operators and stability

13:30 – 16:00 *Break*

16:00 – 18:30 **Parallel Sessions**
ALG-COMB, ANAL, CT&OR, M-PHYS

18:30 – 19:00 *Coffee Break*

19:00 – 19:50 **George Karniadakis**

Fractional Partial Differential Equations:
Theory, Algorithms and Applications

20:00 – 20:50 **Michael Katehakis**

Reinforcement Learning: Connections between
MDPs and MAB Problems

21:00 – **Dinner of the Congress**

The farewell dinner will take place in RYTHMOS, Zografou
at the park Goudi

Saturday, June 30, 2018

Excursion: One Day Cruise to Hydra – Poros – Aegina.

Parallel Sessions

	Room	25B	26A	26B	27A	27B	28A	28B	29A	29B
ALG-COMB	AMΦ.22				*	*	*	*	*	*
ANAL	AMΦ.24	*	*	*	*	*	*	*	*	*
CT	Γ.21									*
DIFFEQ	AMΦ.23	*	*	*	*	*	*	*		
GEOM	Γ.32		*	*		*				
H&PH	Γ.31	*								
LFM	Γ.22				*	*	*			
M-FIN	Γ.21			*						
M-PHYS	Γ.22								*	*
M-ED	Γ.31				*	*	*			
NT	Γ.21	*								
NA&SC	AMΦ.21				*	*	*	*		
PROB-STAT	Γ.31 − 32		*					*	*	
TOP	Γ.22	*	*							

ALG-COMB – Algebra and Combinatorics

ANAL – Analysis

CT – Control Theory, Operations Research and Optimization

DIFFEQ – Differential Equations and Dynamical Systems

GEOM – Geometry

H&PH – History and Philosophy of Mathematics

LFM – Logic and Foundations of Mathematics

M-FIN – Mathematical Finance

M-PHYS – Mathematical Physics

M-ED – Mathematics Education

NT – Number Theory, Arithmetic Geometry, Cryptography

NA&SC – Numerical Analysis and Scientific Computing

PROB-STAT – Probability and Statistics

TOP – Topology and Applications