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HELLENIC REPUBLIC
MINISTRY OF FOREIGN AFFAIRS
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FOR GREEKS ABROAD AND PUBLIC DIPLOMACY



Hellenic Mathematical Society

2nd Congress of Greek Mathematicians SCGM-2022

PROGRAMME



July 4-8
2022

Co - organizers



Department of Mathematics,
National and Kapodistrian University of Athens



Department of Mathematics,
National Technical University of Athens



Department of Mathematics,
Aristotle University of Thessaloniki



Department of Mathematics and Applied Mathematics,
University of Crete



Department of Mathematics,
University of Patras



Department of Mathematics,
University of Ioannina



Department of Mathematics,
University of the Aegean



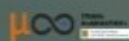
Department of Statistics,
Athens University Economics and Business



Department of Mathematics,
University of Thessaly



School of Science and Technology
Hellenic Open University



Department of Mathematics
University of Western Macedonia

Second Congress of Greek Mathematicians

SCGM-2022

July 4 - 8, 2022

School of Applied Mathematical and Physical Sciences,
National Technical University of Athens

Scientific Programme

Monday, July 4th, 2022		morning
Lecture Hall, Administration Building		
09:00 10:30	Registrations	
10:30 11:30	Opening Ceremony	
11:30 12:30	Coffee Break	
12:30 13:30	Constantinos Dafermos, Brown University <i>Progress in Hyperbolic Conservation Laws</i>	

Monday, July 4th, 2022		afternoon
Amphitheatre 1, SAMPS building		
Session: Analysis		
15:00 15:30	<i>A strong form of Plessner's theorem</i> Myrto Manolaki (University College Dublin)	
15:30 16:00	<i>Harmonic mappings and the Schwarzian derivative</i> Iason Efraimidis (Universidad Autónoma de Madrid)	
16:00 16:30	Coffee Break	
16:30 17:00	<i>Προς τα πίσω τροχιές σε ημιομάδες ολόμορφων συναρτήσεων</i> Konstantinos Zarvalis (Aristotle University of Thessaloniki)	
17:00 17:30	<i>Spherically Convex Functions and Schwarz Lemma</i> Maria Kourou (Julius-Maximilians University of Wuerzburg)	
17:30 18:00	<i>Closed range integral operators on Hardy spaces</i> Konstantinos Panteris (University of Crete)	
18:00 18:30	<i>Semigroups of analytic functions and an extension to Sarason's characterization of vanishing mean oscillation</i> Vassilis Daskalogiannis (Aristotle University of Thessaloniki & American College of Thessaloniki)	
18:30 19:00	<i>Invariant capacities in the unit ball of C^n and exceptional sets for Hardy Sobolev spaces</i> Nikolaos Chalmoukis (Saarland University)	

Monday, July 4th, 2022 afternoon Lecture Hall, Administration Building	
Session: Mathematics Education	
15:00 15:10	<p style="text-align: center;"><i>Mathematics education and Mathematical communities</i></p> <p style="text-align: center;">Fragkiskos Kalavasis (University of the Aegean), coordinator, Introduction</p>
15:15 16:45	<p style="text-align: center;"><i>The impact of scientific journals in mathematics education communities: (fragile) bridgings of (seemingly) incongruent realities</i></p> <p>Andreas Moutsios-Rentzos, chair</p> <ul style="list-style-type: none"> • Sonia Kafoussi (University of the Aegean): <i>HMS-iJME: reflections upon establishing an international mathematics education journal in Greece.</i> • Marianna Tzekaki (Aristotle University of Thessaloniki) & Charoula Stathopoulou (University of Thessaly): <i>Research in mathematics education: A journal for the promotion of mathematics education research in Greece</i> • Dionysios Lappas (National and Kapodistrian University of Athens): <i>Hellenic Mathematical Review: Educational and Didactical challenges.</i> • Manolis Kritikos (Athens University of Economics and Business): <i>The scientific journal ASTROLAVOS in the educational and scientific community: history, impact and perspectives.</i> • Andreas Moutsios-Rentzos (National and Kapodistrian University of Athens): <i>Euclides γ': a communicational bridge of teaching, learning and research communities in an emerging hybrid lifeworld.</i>
17:00 18:30	<p style="text-align: center;"><i>Critical Values and Thinking in Mathematics Education</i></p> <p>Anna Chronaki, chair</p> <ul style="list-style-type: none"> • Penelope Kalogeropoulou (Monash University, Australia): <i>Values in Mathematics Education through an intervention program lens.</i> • Stephanos Keisoglou (Mathematics Educator): <i>Critical thinking meets mathematical competitions.</i> • Stami Tsikopoulou (Mathematics Educator): <i>Mathematical Problems and HumanValues. Thoughts on how Euclid A and Little Euclid address students.</i> • Zoi Dipla (Educator): <i>Playing and making common spaces for learning mathematics.</i> • Anna Chronaki (University of Thessaly & University of Malmo, Sweden): <i>Critical issues concerning values, competences and mathematical thinking for the citizen subject of our precarious times.</i>

Monday, July 4th, 2022 afternoon Multimedia room, NTUA Library (basement)	
Session: Geometry and Topology	
16:30 17:10	<i>Mean curvature flow and homotopy classes of maps between spheres</i> Andreas Savas-Halilaj (University of Ioannina)
17:20 18:00	<i>An isometric flow of G_2 structures</i> Panagiotis Gianniotis (National and Kapodistrian University of Athens)
18:00 18:30	Break
18:30 19:10	<i>Progress on compact homogeneous Einstein manifolds</i> Andreas Arvanitoyeorgos (University of Patras)
19:20 19:40	<i>A class of Einstein submanifolds of Euclidean space</i> Christos-Raent Onti (University of Cyprus)
19:40 20:00	<i>On the Bonnet Problem for Surfaces in 4-Dimensional Space Forms</i> Kleanthis Polymerakis (Aristotle University of Thessaloniki)

Monday, July 4th, 2022 afternoon Lecture room 001, new SAMPS building	
Session: Probability and Statistics	
16:30 17:30	<i>From multiway ANOVA to Alon's conjecture: complexity of coordinate-wise inference algorithms for crossed random effect models</i> Omiros Papaspiliopoulos (Bocconi University, Milano)
17:30 18:00	<i>Anomaly identification under sequential sampling and sampling constraints</i> Georgios Fellouris (University of Illinois at Urbana-Champaign)
18:00 18:30	<i>Nonparametric and high-dimensional functional graphical models</i> Eftychia Solea (ENSAI)
18:30 19:00	<i>Piecewise Deterministic Monte Carlo and the Speed Up Zig-Zag sampler</i> Giorgos Vasdekis (University of Warwick)

Monday, July 4th, 2022 afternoon Lecture room 103, new SAMPS building	
Session: Foundations, Philosophy of Mathematics	
16:00	<i>Groups definable in the disjoint union of structures</i>
16:30	Pantelis Eleftheriou (University of Leeds)
16:30	<i>Some model theory of the tilting correspondence</i>
17:00	Konstantinos Kartas (University of Oxford)
17:00	<i>Pathwise-random trees and models of second-order arithmetic</i>
17:30	Georgios Barbalias (Chinese Academy of Science)
17:30	<i>Δυναμικά κριτήρια μη-ταξινόμησης με αναλλοίωτες ομολογίας και συνομολογίας</i>
18:00	Aristotelis Panagiotopoulos (Carnegie Mellon University)
18:00	<i>The distributivity of Pi over Sigma: from Martin-Loef types and Bishop sets to categories</i>
18:30	Iosif Petrakis (Ludwig Maximilians Universität München)
18:30	<i>First-order sentences in random groups</i>
19:00	Ρίζος Σκλήνος , (Chinese Academy of Science)
19:00	<i>Decidability results of subtheories of polynomial rings and formal power series</i>
19:30	Δήμητρα Χομπιτάκη (Πανεπιστήμιο Κρήτης)
19:30	<i>Χτίζοντας τις μαθηματικές θεωρίες</i>
20:00	Δήμητρα Χριστοπούλου (Εθνικό και Καποδιστριακό Πανεπιστήμιο Αθηνών)

Tuesday, July 5th, 2022 morning	
Amphitheatre 1, SAMPS building	
Session: Analysis	
09:30 10:10	<i>The Dirichlet problem with Sobolev boundary data for the Laplace equation in rough domains</i> Mihalis Mourgoglou (University of the Basque Country)
10:10 10:50	<i>Directional square functions</i> Ioannis Parisis (University of the Basque Country and Ikerbasque)

Tuesday, July 5th, 2022 morning	
Multimedia room, NTUA Library (basement)	
Session: Geometry and Topology	
09:30 10:10	<i>Realising sets of integers as mapping degree sets</i> Christoforos Neofytidis (The Ohio State University)
10:20 11:00	<i>On the forgotten definition of homology of a space via configuration space of charged particles</i> Stephan Klaus (University of Mainz and Mathematisches Forschungsinstitut Oberwolfach)

Tuesday, July 5th, 2022 morning	
Lecture room 001, new SAMPS building	
Session: Probability and Statistics	
09:00 10:00	<i>Mean field limits for weakly interacting diffusions: phase transitions, multiscale analysis and inference</i> Grigorios A. Pavliotis (Imperial College, London)
10:00 10:30	<i>Model-free bounds in finance: a journey through probability, statistics and optimization</i> Antonios Papapantoleon (Technical University, Delft)
10:30 11:00	<i>Mean field analysis and scaling limits for neural networks: typical events and fluctuations</i> Konstantinos Spiliopoulos (Boston University)

Tuesday, July 5th, 2022		morning
Lecture Hall, Administration Building		
11:00 11:30	Coffee Break	
Plenary Talks		
11:30 12:30	Dimitris Koukoulopoulos, University of Montreal <i>Random walks in number theory</i>	
12:30 13:30	Efstratia Kalfagianni, Michigan State University <i>Geometric structures of 3-manifolds and quantum invariants</i>	

Tuesday, July 5th, 2022		afternoon
Lecture Hall, Administration Building		
Plenary Talk		
15:00 16:00	Ioannis Emiris, National Kapodistrian University of Athens <i>On the number of Euclidean embeddings of rigid graphs</i>	
16:00 16:30	Coffee Break	
Tuesday, July 5th, 2022		afternoon
Amphitheatre 1, SAMPS building		
Session: Analysis		
16:30 17:00	<i>Dimension reduction for incompressible subsets of l_p</i> Alexandros Eskenazis (CNRS Sorbonne Université & University of Cambridge)	
17:00 17:30	<i>Improving and maximal inequalities for primes in progressions</i> Christina Giannitsi (Georgia Institute of Technology)	
17:30 18:00	<i>The size of a common tile of several lattices</i> Effie Papageorgiou (University of Crete)	
18:00 18:30	<i>The distribution of reduced quadratic irrationals arising from continued fraction expansions</i> Maria Siskaki (University of Illinois at Urbana-Champaign)	
18:30 19:00	<i>Codimension one multiplier operators</i> Odysseas Bakas (Basque Center for Applied Mathematics)	

Tuesday, July 5th, 2022 afternoon Multimedia room, NTUA Library (basement)	
Session: Geometry and Topology	
16:50 17:10	<i>On local density and local weak density of the hyperspace of sets with finitely many components</i> Foteini Sereti (University of Western Macedonia)
17:20 18:00	<i>A report on the Dimension Theory in Topology and the dimension Dind of A. V. Arhangelskii for finite T_0-topological spaces</i> Dimitrios Georgiou (University of Patras)
18:00 18:30	Break
18:30 19:10	<i>Simplicial volumes and Euler characteristics of (aspherical) manifolds</i> Georgios Raptis (University of Regensburg)
19:20 20:00	<i>Topological Rigidity of Quoric Manifolds</i> Stratos Prasidis (University of the Aegean)

Tuesday, July 5th, 2022 afternoon Lecture room 001, new SAMPS building	
Session: Probability and Statistics	
16:30 17:30	<i>Statistical Distances: A Global Framework for Inference</i> Marianthi Markatou (University at Buffalo)
17:30 18:00	<i>Quantitative Uniform Stability of the Iterative Proportional Fitting Procedure</i> George Deligiannidis (University of Oxford)
18:00 18:30	<i>Noise-Induced Randomization in Regression Discontinuity Designs</i> Nikos Ignatiadis (Stanford University)

Tuesday, July 5th, 2022		afternoon
Lecture room 103, new SAMPS building		
Session: Differential Equations		
16:30 17:10	<i>Analogies between minimal partitions and entire solutions of the vector Allen-Cahn equation</i> N. Alikakos (University of Athens)	
17:15 17:45	<i>The fractional porous medium equation on manifolds with conical singularities</i> N. Roidos (University of Patras)	
17:45 18:00	Break	
18:00 18:30	<i>The monotonicity formula of the stochastic mean curvature flow of graphs</i> D. Antonopoulou (Chester University, UK)	
18:30 19:00	<i>Regularisation of differential equations by noise</i> K. Dareiotis (University of Leeds, UK)	
19:00 19:30	<i>A non-local free boundary problem arising in a model of cell polarization</i> A. Logioti (University of Bonn, Germany)	
19:30 20:00	<i>Layer dynamics for the one-dimensional ε-dependent Cahn-Hilliard/Allen-Cahn equation</i> K. Tzirakis (IACM/FORTH & University of Crete)	

Tuesday, July 5th, 2022		afternoon
Lecture Hall, Administration Building		
Session: Mathematics of Computer Science		
16:30 17:30	<i>Random Walks over Chains of Blocks</i> Aggelos Kiayias (University of Edinburgh)	
17:30 18:00	<i>Towards post-quantum cryptography</i> Katerina Sotiraki (UC Berkeley)	
18:00 18:30	<i>Multiplicative Updates for Symmetric-cone Factorizations</i> Antonios Varvitsiotis (Singapore University of Technology and Design)	
18:30 19:00	<i>Truthful mechanisms for scheduling problems</i> Giorgos Christodoulou , (Aristotle University)	

Wednesday, July 6th, 2022 morning	
Amphitheatre 1, SAMPS building	
Session: Analysis	
09:30	<i>Morita equivalence for operator systems</i>
10:10	Evgenios Kakariadis (University of Newcastle)
10:10	<i>Lower deviation estimates for norms</i>
10:50	Petros Valettas (University of Missouri, Columbia)

Wednesday, July 6th, 2022 morning	
Multimedia room, NTUA Library (basement)	
Session: Geometry and Topology	
09:30	<i>Curvature in Courant algebroids and Graded Geometry</i>
10:10	Panagiotis Batakidis (Aristotle University of Thessaloniki)
10:20	<i>A nonlinear spectrum on closed manifolds</i>
11:00	Christos Mantoulidis (Rice University)

Wednesday, July 6th, 2022 morning	
Lecture Hall, Administration Building	
Session: Mathematics of Computer Science	
09:00	<i>Intrinsic complexity</i>
10:00	Yiannis N. Moschovakis (UCLA)
10:00	<i>Efficient Algorithms for Graph Connectivity Problems</i>
10:30	Loukas Georgiadis (University of Ioannina)
10:30	<i>From Structural Graph Theory to Algorithms</i>
11:00	Archontia Giannopoulou (National and Kapodistrian University of Athens)

Wednesday, July 6th, 2022 morning Lecture room 101, new SAMPS building	
Session: Algebra, Number Theory and Combinatorics	
09:00	<i>On self-extensions of irreducible modules over symmetric groups</i>
10:00	Haralampos Geranios (University of York)
10:15	<i>On the existence of minimal models</i>
10:45	Nikolaos Tsakanikas (Saarland University)

Wednesday, July 6th, 2022 morning Lecture room 001, new SAMPS building	
Session: Numerical Analysis and Scientific Computing	
09:00	<i>Likelihood-weighted active learning with application to Bayesian optimization, uncertainty quantification, and decision making in high dimensions</i>
10:00	Th. Sapsis (Massachusetts Institute of Technology)
10:00	<i>Optimization with learning-informed nonsmooth differential equation constraints</i>
10:30	K. Papafitsoros (Weierstrass Institute Berlin)
10:30	<i>Learning the solution operator of parametric partial differential equations</i>
11:00	P. Perdikaris (University of Pennsylvania)

Wednesday, July 6th, 2022 morning Lecture Hall, Administration Building	
11:00	Coffee Break
11:30	
Plenary Talks	
11:30	Georgios Akrivis, University of Ioannina
12:30	<i>Analysis of numerical methods in the maximal parabolic regularity framework</i>
12:30	Dimitrios Bertsimas, Massachusetts Institute of Technology
13:30	<i>Machine Learning under a Modern Optimization Lens</i>

	Wednesday, July 6th, 2022 afternoon Lecture Hall, Administration Building
	Plenary Talk
15:00 16:00	Perla Sousi, University of Cambridge <i>Picking a spanning tree at random</i>
16:00 16:30	Coffee Break

	Wednesday, July 6th, 2022 afternoon Amphitheatre 1, SAMPS building
	Session: Analysis
16:30 17:00	<i>Separable spaces of continuous functions as Calkin algebras</i> Pavlos Motakis (York University)
17:00 17:30	<i>Multiple ergodic averages along sequences of polynomial growth</i> Konstantinos Tsinas (University of Crete)
17:30 18:00	<i>A negative moments approach to the study of sections of convex bodies</i> Giorgos Chasapis (Carnegie Mellon University)
18:00 18:30	<i>The percolation density $\vartheta(p)$ is analytic</i> Christoforos Panagiotis (University of Geneva)
18:30 19:00	<i>Dynamics of weighted shifts on directed trees</i> Dimitris Papathanasiou (Université de Mons)

Wednesday, July 6th, 2022 afternoon	
Multimedia room, NTUA Library (basement)	
Session: Geometry and Topology	
16:30	<i>Morse foliations of codimension one on the sphere S^3</i>
17:10	Charalampos Charitos (Agricultural University of Athens)
17:20	<i>A specific model of Hilbert geometry on the open unit disc</i>
18:00	Georgios Tsapogas (Agricultural University of Athens)
18:10	<i>Inverse Problems for the X-ray Transform on Asymptotically Hyperbolic Manifolds</i>
18:30	Nikolaos Eptaminitakis (Purdue University)
19:20	<i>(in-)Stability of the Anti-de Sitter spacetime and time-periodic solutions</i>
19:40	Athanasios Chatzicaleas (University of Muenster)

Wednesday, July 6th, 2022 afternoon	
Lecture room 001, new SAMPS building	
Session: Probability and Statistics	
16:30	<i>Longest and heaviest paths in random directed graphs</i>
17:30	Takis Konstantopoulos (University of Liverpool)
17:30	<i>Density functionals for inhomogeneous system</i>
18:00	Dimitrios Tsagkarogiannis (University of L'Aquila)
18:00	<i>Sharp spectral gap for regular and disordered chain of oscillators</i>
18:30	Aggeliki Menegaki (Institut des Hautes Études Scientifiques, Paris)
18:30	<i>Some recent progress on the properties of Schramm-Loewner Evolution (SLE)</i>
19:00	Konstantinos Kavvadias (University of Cambridge)

Wednesday, July 6th, 2022 afternoon Lecture room 103, new SAMPS building	
Session: Differential Equations	
16:30 17:10	<i>Existence theory and propagation of oscillations for the system of viscoelasticity of strain-rate type</i> A. Tzavaras (KAUST, Applied Mathematics and Computational Science)
17:15 17:45	<i>The Closeness of the Ablowitz-Ladik Lattice to non-integrable DNLS Lattice</i> N. Karachalios (University of Thessaly)
17:45 18:15	Break
18:15 18:45	<i>The inverse acoustic scattering problem via stochastic implementation</i> A. Charalambopoulos (NTUA)
18:45 19:15	<i>Scale invariant regularity estimates for second order elliptic equations with lower order coefficients in optimal spaces</i> G. Sakellaris (Aristotle University of Thessaloniki)
19:15 19:45	<i>A numerical solution for various lateral Cauchy problems</i> L. Mindrinos (NTUA)

Wednesday, July 6th, 2022 afternoon Lecture Hall, Administration Building	
Session: Mathematics of Computer Science	
16:30 17:00	<i>The Dynamics of Artificial Intelligence</i> Panayotis Mertikopoulos (CNRS)
17:00 17:30	<i>Evolutionary Graph Theory: Amplification and Optimization</i> Andreas Pavlogiannis (Aarhus University)
17:30 18:00	<i>Strongly Polynomial Time Algorithms for Learning Halfspaces and Approximate Forster Transforms</i> Christos Tzamos (University of Wisconsin-Madison)
18:00 18:30	<i>How to handle Biased Data and Multiple Agents in Machine Learning?</i> Manolis Zampetakis (UC Berkeley)
18:30 19:00	<i>Incentive-Aware Machine Learning for Decision Making</i> Chara Podimata (MIT)

Wednesday, July 6th, 2022 afternoon Lecture room 101, new SAMPS building	
Session: Algebra, Number Theory and Combinatorics	
16:30 17:00	<i>The Generic Anisotropy of Simplicial 1-Spheres</i> Vasiliki Petrotou (University of Ioannina)
17:00 17:30	<i>Connected algebraic subgroups of $Bir(C \times P^n)$ not contained in a maximal one.</i> Sokratis Zikas (University of Basel)
17:30 18:00	<i>Tamagawa numbers of elliptic curves with torsion points</i> Mentzelos Melistas (Steklov Mathematical Institute)
18:00 18:30	Break
18:30 19:00	<i>Gorenstein decomposable models</i> Danai Deligeorgaki (KTH)
19:00 19:30	<i>Counting with symmetric and quasisymmetric functions</i> Basileios-Dionysios Moustakas (Bar-Ilan University)
19:30 20:00	<i>Quadratic robust and generalized robust toric ideals of graphs</i> Christos Tatakis (University of Ioannina)

Thursday, July 7th, 2022 morning	
Amphitheatre 1, SAMPS building	
Session: Analysis	
09:30	<i>The Denjoy-Wolff set and wandering domains</i>
10:10	Vasiliki Evdoridou (University of Liverpool)
10:10	<i>Analysis on thin Cantor sets</i>
10:50	Vyron Vellis (University of Tennessee, Knoxville)

Thursday, July 7th, 2022 morning	
Multimedia room, NTUA Library (basement)	
Session: Geometry and Topology	
09:30	<i>Rail knotoid invariants</i>
10:10	Dimitrios Kodokostas (National Technical University of Athens)
10:20	<i>Framed Thomson Groups</i>
11:00	Aristides Kontogeorgis (National and Kapodistrian University of Athens)

Thursday, July 7th, 2022 morning	
Lecture room 001, new SAMPS building	
Session: Numerical Analysis and Scientific Computing	
09:00	<i>Embedding classical dynamics in a quantum computer</i>
09:30	D. Giannakis (New York University)
09:30	<i>A relaxation scheme for the numerical approximation of the Schrödinger-Poisson system</i>
10:00	Th. Katsaounis (University of Crete & IACM/FORTH)
10:00	<i>A hybrid FV/FE method for weakly dispersive highly nonlinear waves on unstructured meshes</i>
10:30	M. Kazolea (INRIA, University of Bordeaux, CNRS)
10:30	<i>A nonconforming finite element for ice shelf hydroelastic flexure</i>
11:00	Th. Papathanasiou (Aston University)

Thursday, July 7th, 2022		morning
Lecture room 101, new SAMPS building		
Session: Algebra, Number Theory and Combinatorics		
09:00 10:00	<i>Torsion phenomena for zero-cycles on a product of curves over a number field</i> Valia Gazaki (University of Virginia)	
10:15 10:45	<i>Relating homomorphism spaces between Specht modules of different degrees</i> Dimitra-Dionysia Stergiopoulou (National and Kapodistrian University of Athens & University of Thessaly)	

Thursday, July 7th, 2022		morning
Lecture Hall, Administration Building		
11:00 11:30	Coffee Break	
Plenary Talks		
11:30 12:30	Maria Chlouveraki, University of Versailles-St Quentin <i>The symmetric group: mysteries and miracles</i>	
12:30 13:30	Nikolaos Frantzikinakis, University of Crete <i>Randomness properties of bounded sequences: An ergodic point of view</i>	

	Thursday, July 7th, 2022 afternoon Lecture Hall, Administration Building
	Plenary Talk
15:00 16:00	Ioannis Kontoyiannis, University of Cambridge <i>Entropy in probability and additive combinatorics</i>
16:00 16:30	Coffee Break

	Thursday, July 7th, 2022 afternoon Amphitheatre 1, SAMPS building
	Session: Analysis
16:30 17:00	<i>A scale-critical trapped surface formation criterion for the Einstein-Maxwell system</i> Nikolaos Athanasiou (American College of Thessaloniki)
17:00 17:30	<i>Περιοδικές λύσεις και νήσοι ευστάθειας στον Anti-de Sitter χωροχρόνο</i> Athanasios Chatzikaleas (University of Münster)
17:30 18:00	<i>The anomalous spreading property for a system of Fisher-KPP type equations</i> Alexandra Stavriani (Stanford University)
18:00 18:30	<i>On the well-posedness of the derivative nonlinear Schrödinger equation</i> Maria Ntekoume (Rice University)
18:30 19:00	<i>Geometric rigidity in variable domains and applications to SDRI models</i> Konstantinos Zemas (University of Münster)

Thursday, July 7th, 2022 afternoon	
Multimedia room, NTUA Library (basement)	
Session: Geometry and Topology	
16:30	<i>Kauffman bracket skein modules: A braid theoretic approach</i>
17:10	Ioannis Diamantis (Maastricht University, The Netherlands)
17:20	<i>Invariants of multi-linkoids and bondoids</i>
18:00	Boštjan Gabrovšek (University of Ljubljana)
18:10	<i>On the spectrum of twisted Laplacians and the Teichmüller representation</i>
18:30	Polyxeni Spilioti (Aarhus University)

Thursday, July 7th, 2022 afternoon	
Lecture Hall, Administration Building	
Session: Mathematics of Computer Science	
16:00	Christos Papadimitriou (Columbia University)
17:00	Constantinos Daskalakis (MIT)
17:00	Constantinos Daskalakis (MIT)
18:00	<i>On the Hidden Geometry of Datasets and Approximate Metric Embeddings</i>
18:30	Vaggos Chatziafratis (University of California Santa Cruz)
18:30	<i>Spectral Ranking Regression</i>
19:00	Stratis Ioannidis (Northeastern)

Thursday, July 7th, 2022 afternoon Lecture room 103, new SAMPS building	
Session: Differential Equations	
16:30 17:10	<i>Simple solutions in anisotropic elasticity</i> G. Dassios (University of Patras)
17:15 17:45	<i>The emergence of weak turbulence in general relativity</i> G. Moschidis (Princeton University, USA)
17:45 18:15	Break
18:15 18:45	<i>Feedback control of the 1d viscous Saint-Venant model</i> I. Karafyllis (NTUA)
18:45 19:15	<i>An inequality regarding completely monotone functions</i> V. Bitsouni (University of Athens)
19:15 19:45	<i>Quasilinear elliptic equations involving absorption terms and measure data</i> K. Gkikas (University of Athens)

Thursday, July 7th, 2022 afternoon Lecture room 001, new SAMPS building	
Session: Numerical Analysis and Scientific Computing	
16:30 17:00	<i>Lyapunov functions, convergence to equilibrium and applications to sampling and optimization</i> K. Zygalakis (University of Edinburgh)
17:00 17:30	<i>Inference methods for stochastic differential equation(s) and application</i> E. Kalligiannaki (IACM/FORTH)
17:30 18:00	<i>Multiscale simulations of complex systems by learning their effective dynamics</i> G. Arambatzis (ETH, Zürich)
18:00 18:30	Break
18:30 19:00	<i>Preconditioning techniques for Non-Symmetric Real Toeplitz Systems</i> D. Noutsos (University of Ioannina)
19:00 19:30	F. Karakatsani (University of Ioannina)
19:30 20:00	<i>Advances in finite element computation and analysis of PDE systems within random geometries based on Embedded FEMs and applications</i> E. Karatzas (National Technical University of Athens)

Thursday, July 7th, 2022 afternoon Lecture room 101, new SAMPS building	
Session: Algebra, Number Theory and Combinatorics	
16:30	<i>Reduction of stabilizers and generalized Donaldson-Thomas invariants</i>
17:30	Michail Savvas (University of Texas at Austin)
17:30	<i>Reedy categories and finite dimensional algebras</i>
18:00	Georgios Dalezios (National and Kapodistrian University of Athens)
18:00	Break
18:30	
18:30	<i>Nakayama algebras and 321-avoiding permutations</i>
19:00	Eirini Chavli (University of Stuttgart)
19:00	<i>Finite group schemes acting on schemes</i>
19:30	Kostas Karagiannis (University of Manchester)
19:30	<i>Geometry of p-adic representations</i>
20:00	Kostas I. Psaromiligkos (The University of Chicago)

	Friday, July 8th, 2022 morning Multimedia room, NTUA Library (basement)
	Session: Geometry and Topology
09:30	<i>Differential structures on topological spaces. A categorical approach</i>
10:10	Maria Papatriantafillou (National and Kapodistrian University of Athens)
10:20	<i>Spinor pairs and the concentration principle for Dirac operators</i>
11:00	Manousos Maridakis

	Friday, July 8th, 2022 morning Lecture room 001, new SAMPS building)
	Session: Numerical Analysis and Scientific Computing
09:00	E. Gallopoulos (University of Patras)
10:00	
10:00	<i>On the numerical approximation of partial differential equations with logarithmic non-linearity</i>
10:30	G. Zouraris (University of Crete)
10:30	<i>Imaging in three-dimensional waveguides with partial-aperture data</i>
11:00	D. Mitsoudis (University of West Attica & IACM/FORTH)

	Friday, July 8th, 2022 morning Lecture room 101, new SAMPS building)
	Session: Algebra, Number Theory and Combinatorics
09:00	<i>Adjoining roots to ring spectra and algebraic K-theory.</i>
10:00	Tasos Moulinos (Institut de Mathématiques de Toulouse)
10:15	<i>A canonical ideal approach to the deformation theory of curves with automorphisms</i>
10:45	Alexios Terezakis (National and Kapodistrian University of Athens)

Friday, July 8th, 2022		morning
Lecture room 103, new SAMPS building		
Session: The History of Mathematics		
09:00 09:30	<i>From 'theory' to 'precision': numerical calculations in the early post-Christian centuries</i> Francesca Papanika	
09:30 10:00	<i>Identifying the parts of a proposition in Euclid's Elements using machine learning algorithms</i> Vasilios Siochos	
10:00 10:30	<i>Byzantine mathematics as the constant sideler: where do the Mathematics of the Eastern Empire stand in the history of the Medieval Mathematical world</i> Athanasia Megremi	
10:30 11:00	<i>Antagonism as Essential Part of Ancient Greek Milieu: The case of Mathematics</i> Michalis Sialaros	

Friday, July 8th, 2022		morning
Lecture Hall, Administration Building		
11:00 11:30	Coffee Break	
Plenary Talks		
11:30 12:30	Spyridon Alexakis, University of Toronto <i>Reconstructing a Riemannian metric form geodesic data: The problem of lens rigidity</i>	
12:30 13:30	Panagiotis Souganidis, University of Chicago <i>Deterministic surface growth models</i>	

Friday, July 8th, 2022 afternoon Lecture room 101, new SAMPS building	
Session: Algebra, Number Theory and Combinatorics	
15:00	<i>K-Absolutely pure complexes</i>
15:30	Ilias Kaperonis (National and Kapodistrian University of Athens)
15:30	<i>Szygies and curves</i>
16:00	Ioannis Tsouknidas (National and Kapodistrian University of Athens)
16:00	Coffee Break
16:30	<i>Introduction to Zastava spaces</i>
17:00	Andreas Hayash (University of Massachusetts Amherst)
17:00	<i>Some classification results in higher-dimensional Auslander–Reiten theory</i>
17:30	Laertis Vaso (NTNU)
17:30	Break
18:00	<i>On the linearity of fundamental groups of certain graph of groups with free abelian vertex groups</i>
18:30	Dafni Tsipa (University of the Aegean)
18:30	<i>Algebraic Dirac operators and Dirac cohomology</i>
19:00	Spyros Afentoulidis (Université de Lorraine, Metz)