



NATIONAL TECHNICAL UNIVERSITY OF ATHENS  
SCHOOL OF APPLIED MATHEMATICAL AND PHYSICAL SCIENCES  
DEPARTMENT OF MATHEMATICS

**7th MATH@NTUA Summer School**

**“Mathematical Analysis”**

**in honor of Spiros Argyros**

**June 27 – July 3, 2024**

# Speakers

## I. Mini Courses

- Silouanos Brazitikos, University of Crete
- Alexandros Eskenazis, Sorbonne Université and Trinity College, Cambridge
- Vassilis Gregoriades, National Technical University of Athens
- Marina Iliopoulou, National and Kapodistrian University of Athens
- Pavlos Motakis, York University, Toronto

## II. Invited Talks

- George Androulakis, University of South Carolina
- Georgios Katsimpas, Harbin Engineering University
- Elias Katsoulis, East Carolina University
- Sophocles Mercourakis, National and Kapodistrian University of Athens
- Mihalis Mourgoglou, University of the Basque Country & Ikerbasque
- Dimitrios Ntalampekos, Stony Brook University
- Aristotelis Panagiotopoulos, Kurt Gödel Research Center, University of Vienna
- Yiannis Sakellaridis, Johns Hopkins University
- Bünyamin Sari, University of North Texas
- Konstantinos Tyros, National and Kapodistrian University of Athens
- Petros Valettas, University of Missouri, Columbia

# Πρόγραμμα

## Πέμπτη, 27 Ιουνίου 2024

09:30-10:20 – Αλέξανδρος Εσκενάζης, *Μετρικές εμφυτεύσεις, I*

10:30-11:00 – Καφές

11:00-11:50 – Αλέξανδρος Εσκενάζης, *Μετρικές εμφυτεύσεις, II*

12:00-12:50 – Πέτρος Βαλέττας, *Gaussian Methods in Linear Dvoretzky Theory*

13:00-13:30 – Καφές

13:30-15:00 – Βασίλης Γρηγοριάδης, *Εξαγωγή κατά σημείο συγκλίνουσας υπακολουθίας συνεχών συναρτήσεων I & II*

18:00-19:00 – Δημήτριος Νταλαμπέκος, *Παραμετροποίηση μετρικών επιφανειών πεπερασμένου εμβαδού (διαδικτυακά)*

## Παρασκευή, 28 Ιουνίου 2024

09:30-10:20 – Αλέξανδρος Εσκενάζης, *Μετρικές εμφυτεύσεις, III*

10:30-11:00 – Καφές

11:00-11:50 – Αλέξανδρος Εσκενάζης, *Μετρικές εμφυτεύσεις, IV*

12:00-12:50 – Αριστοτέλης Παναγιωτόπουλος, *Classifying irreducible unitary representations is hard*

13:00-13:30 – Καφές

13:30-15:00 – Βασίλης Γρηγοριάδης, *Εξαγωγή κατά σημείο συγκλίνουσας υπακολουθίας συνεχών συναρτήσεων III & IV*

18:00-19:30 – Παύλος Μοτάκης, *Methods for constructing Banach spaces with prescribed properties in their operator spaces, I & II (διαδικτυακά)*

## Δευτέρα, 1 Ιουλίου 2024

09:30-10:20 – Σιλουανός Μπραζιτίκος, *Μετασχηματισμός Cramér, συνάρτηση βάθους του Tukey και thresholds για λογαριθμικά κοίλα μέτρα, I*

10:30-11:00 – Καφές

11:00-11:50 – Σιλουανός Μπραζιτικός, *Μετασχηματισμός Cramér, συνάρτηση βάθους του Tukey και thresholds για λογαριθμικά κοίλα μέτρα, II*

12:00-12:50 – Κωνσταντίνος Τύρος, *Berry-Esseen bounds for random tensors*

13:00-13:30 – Καφές

13:30-15:00 – Μαρίνα Ηλιοπούλου, *The polynomial method, I & II*

18:00-19:30 – Παύλος Μοτάκης, *Methods for constructing Banach spaces with prescribed properties in their operator spaces, III & IV* (διαδικτυακά)

### Τρίτη, 2 Ιουλίου 2024

09:30-10:20 – Μαρίνα Ηλιοπούλου, *The polynomial method, III*

10:30-11:00 – Καφές

11:00-11:50 – Μαρίνα Ηλιοπούλου, *The polynomial method, IV*

12:00-12:50 – Ηλίας Κατσούλης, *Fell's absorption principle for semigroup operator algebras*

13:00-13:30 – Γεώργιος Κατσίμπας, *Operator-algebraic aspects of Free Probability Theory*

13:30-14:00 – Καφές

14:00-15:30 – Σιλουανός Μπραζιτικός, *Μετασχηματισμός Cramér, συνάρτηση βάθους του Tukey και thresholds για λογαριθμικά κοίλα μέτρα, III & IV*

### Τετάρτη, 3 Ιουλίου 2024

09:00-09:50 – Μιχάλης Μούργουλου, *Varopoulos extensions and Applications to Boundary Value Problems in rough domains*

10:00-10:50 – Bünyamin Sari, *Banach spaces with the Lebesgue property of Riemann integrability*

11:00-11:30 – Καφές

11:30-12:20 – Χαιρετισμοί: Κυριακή Κυριάκη, Σουζάννα Παπαδοπούλου, Σπύρος Αργυρός

12:30-13:20 – Γιάννης Σακελλαρίδης, *Riemann's zeta function, period integrals, and quantization*

13:30-14:00 – Καφές

14:00-14:50 – Γιώργης Ανδρουλάκης, *Connections between classical and quantum information theory*

15:00-15:50 – Σοφοκλής Μερκουράκης, *Ομοιόμορφη Κατανομή ακολουθιών και  $n$  αλληλεπίδρασή της με τη Συναρτησιακή Ανάλυση*

## Abstracts

### I. Mini Courses

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**Βασίλειος Γρηγοριάδης** (Εθνικό Μετσόβιο Πολυτεχνείο)

*Εξαγωγή κατά σημείο συγκλίνουσας υπακολουθίας συνεχών συναρτήσεων*

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Όπως προκύπτει από δουλειά των Rosenthal και Bourgain-Fremlin-Talagrand, κάθε κατά σημείο φραγμένη ακολουθία συνεχών πραγματικών συναρτήσεων που ορίζονται σε έναν πλήρη και διαχωρίσιμο μετρικό χώρο, της οποίας κάθε σημείο συσσώρευσης (στην τοπολογία της κατά σημείο σύγκλισης) είναι Borel-μετρήσιμη συνάρτηση, έχει κατά σημείο συγκλίνουσα υπακολουθία. Αυτό το αποτέλεσμα έχει εφαρμογές στην τοπολογία και συναρτησιακή ανάλυση, όπως για παράδειγμα στη μελέτη των συμπαγών υποσυνόλων των Baire-1 πραγματικών συναρτήσεων που ορίζονται σε πλήρη και διαχωρίσιμο μετρικό χώρο. Ο Debs έδωσε μια απόδειξη του προηγούμενου αποτελέσματος όπου η ζητούμενη υπακολουθία προκύπτει με κατασκευαστικό τρόπο. Σε αυτή τη σειρά ομιλιών αρχικά παρουσιάζουμε το αποτέλεσμα και μερικές εφαρμογές του και στη συνέχεια αναλύουμε τα κύρια σημεία της κατασκευαστικής απόδειξης του Debs. Δύο ουσιαστικά εργαλεία είναι ένα αποτέλεσμα σταθερού σημείου του Μοσχοβάκη και μια ειδική κατηγορία φίλτρων εμπνευσμένα από μια κατασκευή του Solovay.

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**Αλέξανδρος Εσκενάζης** (Sorbonne Université and Trinity College, Cambridge)

*Μετρικές εμφυτεύσεις*

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Θα παρουσιάσουμε μια εισαγωγή στην θεωρία εμφυτεύσεων πεπερασμένων μετρικών χώρων. Ανάμεσα στα θέματα που θα συζητηθούν περιλαμβάνονται οι bi-Lipschitz εμφυτεύσεις σε χώρους Hilbert, οι εμφυτεύσεις doubling μετρικών χώρων και επίπεδων γραφημάτων, η μετρική ελάττωση της διάστασης, και η θεωρία των μετρικών type και cotype. Αν υπάρξει χρόνος, μπορεί να αναφερθούμε και σε εμφυτεύσεις σε χώρους Alexandron, σε μετρικά θεωρήματα τύπου Kwariεί, και σε άλλα σύγχρονα θέματα.

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**Μαρίνα Ηλιοπούλου** (Εθνικό και Καποδιστριακό Πανεπιστήμιο Αθηνών)

*The polynomial method*

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In the last 15 years, algebraic techniques have emerged in the intimately connected areas of incidence geometry and harmonic analysis, revealing a deep algebraic-geometric nature underlying major problems in the fields. This all started in 2008, when Dvir

employed the polynomial method, an old technique from number theory, to solve the Kakeya problem in finite fields. In this series of talks, we will introduce Dvir's solution, as well as the refined "polynomial partitioning" method by Guth and Katz (developed a little later to solve the Erdős distinct distances problem on the plane). We will then discuss applications in incidence geometry (joints problem, Szemerédi-Trotter theorem) and in harmonic analysis (Fourier restriction problem).

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**Παύλος Μοτάκης** (York University, Toronto)

*Methods for constructing Banach spaces with prescribed properties in their operator spaces*

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One of the aspects of the classical fields of Banach space theory is the construction of Banach spaces  $X$  such that  $\mathcal{L}(X)$ , the algebra of bounded linear operators on  $X$ , satisfies a prescribed property. Main examples of this are the  $\mathcal{L}_\infty$ -space by Argyros and Haydon on which every bounded linear operator is a scalar multiple of the identity plus a compact operator and the reflexive space by Argyros and the speaker on which every bounded linear operator has a non-trivial closed invariant subspace. Other recent developments show that the quotient algebra of  $\mathcal{L}(X)$  over its compact operator ideal can be any separable  $C(K)$  space and even isomorphic to a Hilbert space. These achievements are based on a long and rich history of construction techniques developed by Tsirelson, Maurey, Rosenthal, Bourgain, Delbaen, Schlumprecht, Gowers, Argyros, Deliyanni, and others. In this mini-course, we will explore the main milestones in the development of this theory and focus on some of the details of certain representative examples.

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**Σιλουανός Μπραζιτικός** (Πανεπιστήμιο Κρήτης)

*Μετασχηματισμός Cramér, συνάρτηση βάθους του Tukey και thresholds για λογαριθμικά κοίλα μέτρα*

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Εξετάζουμε την σχέση του μετασχηματισμού Cramér με την συνάρτηση βάθους του Tukey. Οι δύο συναρτήσεις συγκρίνονται για κάθε μέτρο πιθανότητας μέσω της ανισότητας Chernoff. Για τα λογαριθμικά κοίλα μέτρα αποδεικνύουμε ότι ισχύει και μια αντίστροφη ανισότητα, μέσω της οποίας δείχνουμε thresholds για γινόμενα από λογαριθμικά κοίλα μέτρα.

## II. Invited Talks

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**Γιώργης Ανδρουλάκης** (University of South Carolina)

*Connections between classical and quantum information theory*

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In this introductory talk I will focus on the following questions: How can classical information be quantified? How can quantum information be quantified? How can two classical information sources be distinguished? How can two quantum information sources be distinguished? The goal of the talk will be to give some connections between classical and quantum information theory while exploring the answers to the above questions. No previous knowledge of classical or quantum information theory will be assumed.

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**Πέτρος Βαλέττας** (University of Missouri, Columbia)

*Gaussian Methods in Linear Dvoretzky Theory*

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The Dvoretzky theorem is a fundamental concept in the local theory of normed spaces. In its simplest form, it states that high-dimensional normed spaces contain relatively large subspaces that are almost Euclidean. Determining its optimal quantitative form is an important open question dating back to Grothendieck in the 1950s. This talk has two main purposes: first, to provide a brief historical overview of the problem, and second, to discuss the current standing by explaining how probabilistic dichotomies, based on dipole randomness and structure, are a crucial element in resolving the random version of the theorem. Based on joint work(s) with Grigoris Paouris (Texas A&M University).

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**Γεώργιος Κατσίμπας** (Harbin Engineering University)

*Operator-algebraic aspects of Free Probability Theory*

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Motivated by the (still open) free group factor isomorphism problem, Free Probability theory was originated by Voiculescu in the 1980's as an extension of classical probability theory, and views bounded linear operators on Hilbert spaces as non-commutative analogs of classical random variables. Free Probability shares central connections with diverse mathematical fields, including operator algebras, random matrix theory and combinatorics. In this talk, we will present an overview of the fundamental concepts encountered in the theory of Free Probability, with particular emphasis on the notion of free independence, and present various applications in the field of operator algebras. A major modern research area in this field concerns the development of notions of entropy in the non-commutative context, which gave answers to longstanding open problems regarding the structure of the

free group factors. In this direction, we will discuss the development of non-microstate notions of entropy within the field of bi-free probability theory.

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**Ηλίας Κατσούλης** (East Carolina University)

*Fell's absorption principle for semigroup operator algebras*

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Fell's absorption principle states that the left regular representation of a group absorbs any unitary representation of the group when tensored with it. In a weakened form, this result carries over to the left regular representation of a right LCM submonoid of a group and its Nica covariant isometric representations but it fails if the semigroup does not satisfy independence. In this paper we explain how to extend Fell's absorption principle to an arbitrary submonoid  $P$  of a group  $G$  by using an enhanced version of the left regular representation. Li's semigroup  $C^*$ -algebra  $C^*(P)$  and its representations appear naturally in our context. Using the enhanced left regular representation, we not only provide a very concrete presentation for the reduced object for  $C^*(P)$  but we also resolve open problems and obtain very transparent proofs of earlier results. In particular, we address the non-selfadjoint theory and we show that the non-selfadjoint object attached to the enhanced left regular representation coincides with that of the left regular representation. Other applications will also be discussed.

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**Σοφοκλής Μερκουράκης** (Εθνικό και Καποδιστριακό Πανεπιστήμιο Αθηνών)

*Ομοιόμορφη Κατανομή ακολουθιών και  $n$  αλληλεπίδρασή της με τη Συναρτησιακή Ανάλυση*

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Στην ομιλία αυτή θα παρουσιάσουμε πρώτα κάποιες εφαρμογές της Θεωρίας της Ομοιόμορφης Κατανομής ακολουθιών (Uniform Distribution of sequences) στη Συναρτησιακή Ανάλυση και κατόπιν έννοιες και αποτελέσματα της ίδιας Θεωρίας, τα οποία θέτουμε σε ένα ευρύτερο πλαίσιο. Στο πλαίσιο αυτό εντάσσεται και η γενίκευση ενός κλασικού αποτελέσματος αυτής της Θεωρίας, το οποίο ισχύει για αύξουσες συναρτήσεις  $f : [0, 1] \rightarrow \mathbb{R}$ , για την κλάση των συναρτήσεων φραγμένης κύμανσης.

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**Μιχάλης Μούργουλου** (University of the Basque Country & Ikerbasque)

*Varopoulos extensions and Applications to Boundary Value Problems in rough domains*

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In this talk I will talk about some recent advances in solvability of Boundary Value Problems for second order elliptic operators in rough domains. The main ingredient is the construction of Varopoulos' type extensions. Namely, those are extensions  $u$  of boundary data  $f \in L^p$  and  $w$  of boundary data  $g$  in the Hajlasz-Sobolev space  $W^{1,p}$  so that the



Carleson functional of  $\nabla u$  and  $Lw$  are in  $L^p$  and the non-tangential maximal function of  $u$  and  $\nabla w$  are in  $L^p$  with norms bounded by the  $L^p$  norm of  $f$  and the  $W^{1,p}$  norm of  $g$  respectively. My plan is to show how those extensions appear in a natural way and sketch their construction.

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**Δημήτριος Νταλαμπέκος** (Stony Brook University)

*Παραμετροποίηση μετρικών επιφανειών πεπερασμένου εμβαδού*

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Θα παρουσιάσουμε το ιστορικό της παραμετροποίησης επιφανειών από τα κλασικά αποτελέσματα για λείες επιφάνειες έως την σύγχρονη έρευνα σε μη λείες επιφάνειες. Το πρόβλημα της παραμετροποίησης λείων επιφανειών με σύμμορφες απεικονίσεις επιλύθηκε το 1907 από τους Koebe και Poincaré. Σε μη λείες επιφάνειες όπου δεν υπάρχει εφαπτόμενος χώρος χρησιμοποιούμε ημισύμμορφες, ημισυμμετρικές, ή Lipschitz απεικονίσεις. Θα περιγράψουμε κοινή εργασία με τον Matthew Romney όπου επιλύουμε το πρόβλημα της παραμετροποίησης για όλες τις μη λείες επιφάνειες πεπερασμένου εμβαδού. Συγκεκριμένα, αποδεικνύουμε ότι κάθε μετρική σφαίρα πεπερασμένου εμβαδού μπορεί να παραμετροποιηθεί από την Ευκλείδεια σφαίρα με μία ασθενώς ημισύμμορφη απεικόνιση.

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**Αριστοτέλης Παναγιωτόπουλος** (Kurt Gödel Research Center, University of Vienna)

*Classifying irreducible unitary representations is hard*

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One of the leading questions in many mathematical research programs is whether a certain collection of objects can be classified under some notion of equivalence using "simple" invariants. Invariant descriptive set-theory provides a formal framework for measuring the intrinsic complexity of classification problems and for establishing negative anti-classification results. In this talk, I will survey this anti-classification "toolkit", using the problem of classifying the unitary representations of a countable discrete group as a study case. In the process, I will cover some classical results (Glimm, Effros, Hjorth) as well as some more recent developments coming from my joint work with Shaun Allison as well as with David Kerr.

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**Γιάννης Σακελλαρίδης** (Johns Hopkins University)

*Riemann's zeta function, period integrals, and quantization*

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It has been known since Riemann's 1859 report to the Berlin Academy that the zeta function, and subsequently its generalizations (called  $L$ -functions), often admit a presentation as integrals of certain highly symmetric functions (automorphic forms), whose

symmetries give rise to properties of zeta such as the meromorphic continuation and the functional equation. Such integral presentations, however, had been haphazard and poorly understood, with no obvious connection between the definition of the  $L$ -function and the integral representing it. I will present an explanation of this method that has surprising connections to quantum field theory. The explanation suggests that there is a duality between certain “nice” symplectic manifolds (with group actions), such that the “quantization” of one manifold gives rise to an  $L$ -function, while the “quantization” of its dual gives rise to the period integral. (All the heavy terms in this abstract will be explained.) This is joint work with David Ben-Zvi and Akshay Venkatesh.

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**Bünyamin Sari** (University of North Texas)

*Banach spaces with the Lebesgue property of Riemann integrability*

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A classical theorem often covered in introductory Analysis classes is the Lebesgue criterion of Riemann integrability, stating that a bounded function  $f : [0, 1] \rightarrow \mathbb{R}$  is Riemann integrable if and only if the set of discontinuities of  $f$  has Lebesgue measure zero. The Riemann integral of a function  $f$  from unit interval into a Banach space  $X$  is defined in a similar fashion. The value of the integral of  $f$  is a vector  $x_f$  in the space  $X$  which is arbitrarily well approximated in norm by the Riemann sums of the form  $\sum_{i=1}^n (p_i - p_{i-1})f(t_i)$  for partitions  $0 = p_0 < \dots < p_n = 1$  and tags  $t_i \in (p_{i-1}, p_i)$ . However, the Lebesgue criterion fails for every classical Banach space except for  $X = \ell_1$ . For instance, the function  $f(r_i) = e_i$  that maps rationals  $r_i$  to the unit basis vectors  $e_i$  in  $c_0$  or  $\ell_p, 1 < p < \infty$ , and zero elsewhere is discontinuous everywhere and Riemann integrable with its Riemann integral is zero. *Which classes of infinite dimensional Banach spaces satisfy the Lebesgue criterion?* This talk will introduce a recent solution to this problem, unveiling a novel notion of sequential asymptotic structure in Banach spaces. We'll explore how this concept contrasts with other asymptotic structures, a line of inquiry pioneered by the Greek school through the construction of intriguing examples of exotic Banach spaces.

Based on two joint works with Harrison Gaebler, and H. Gaebler and Pavlos Motakis.

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**Κωνσταντίνος Τύρος** (Εθνικό και Καποδιστριακό Πανεπιστήμιο Αθηνών)

*Berry-Esseen bounds for random tensors*

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Let  $d, n$  be positive integers and let  $\mathbf{X} = \langle X_i : i \in [n]^d \rangle$  be a symmetric and exchangeable random tensor with entries of bounded third moment that vanish on diagonal indices. We obtain estimates for the Kolmogorov distance to appropriately chosen Gaussians, of linear functions  $\sum_{i \in [n]^d} \theta_i X_i$  of the random tensor  $\mathbf{X}$ . Our approach requires the development of a combinatorial CLT for high-dimensional tensors which provides quantitative normality of statistics of the form  $\sum_{(i_1, \dots, i_d) \in [n]^d} \zeta(i_1, \dots, i_d, \pi(i_1), \dots, \pi(i_d))$ , where  $\zeta : [n]^d \times [n]^d \rightarrow \mathbb{R}$  is a deterministic real tensor, and  $\pi$  is a random permutation uniformly distributed on the

symmetric group  $\mathbb{S}_n$ . The latter result extends classical work of Bolthausen, who covered the case  $d = 1$ , and more recent work of Barbour/Chen who treated the case  $d = 2$ . If time permits, we will see some applications of the above results. This is a joint work with P. Dodos.



## List of Participants

1. Alexiou Galateia, National Technical University of Athens
2. Alliou Magdalini, National and Kapodistrian University of Athens
3. Ampelakiotis Stavros, National Technical University of Athens
4. Andrianakos Ioannis, University of Piraeus
5. Androulakis George, University of South Carolina
6. Anoussis Michalis, University of the Aegean
7. Apazidis Theodoros, National Technical University of Athens
8. Arkoudis Ioannis, National Technical University of Athens
9. Arletis Konstantinos, National and Kapodistrian University of Athens
10. Armenaki-Giouvanoglou Eirini, National and Kapodistrian University of Athens
11. Armeniakos Sotiris, Technical University of Vienna
12. Arvanitis Alexandros, National Technical University of Athens
13. Aslanidis Alexandros, National and Kapodistrian University of Athens
14. Athanasiadou Evagelia, National and Kapodistrian University of Athens
15. Athanasiou Vaggelis, National and Kapodistrian University of Athens
16. Athanasoulis Hector, National and Kapodistrian University of Athens
17. Axarlis Michail, National and Kapodistrian University of Athens
18. Bartatila Areti, National and Kapodistrian University of Athens
19. Blani Dimitra, National and Kapodistrian University of Athens
20. Brazitikos Silouanos, University of Crete
21. Chasouras Giannis, National and Kapodistrian University of Athens
22. Chatzinikolaou Alexandros, National and Kapodistrian University of Athens
23. Christopoulos Marios, National Technical University of Athens
24. Chrysafogeorgos Giorgos, National Technical University of Athens
25. Daniilidis Stelios, National Technical University of Athens
26. Deliyanni Irene, National and Kapodistrian University of Athens

27. Derleres Michail, Texas A&M University
28. Diamantis Ioannis, National Technical University of Athens
29. Dimou Nikos, University of North Carolina
30. Doulgerakis Nikolaos, National and Kapodistrian University of Athens
31. Doumas Aristides, National Technical University of Athens
32. Drivaliaris Dimos, University of the Aegean
33. Drosos Petros, National and Kapodistrian University of Athens
34. Emmanouil Dimitrios, National and Kapodistrian University of Athens
35. Eskenazis Alexandros, Sorbonne Universite and Trinity College, Cambridge
36. Filippakopoulos Alexios, Athens University of Economics and Business
37. Fotiadou Georgia, University of Ioannina
38. Fountoulakis Angelos, National Technical University of Athens
39. Fragkoulis Nikos, National Technical University of Athens
40. Ganotis Konstantinos, National and Kapodistrian University of Athens
41. Gasparis Ioannis, National Technical University of Athens
42. Gatos Aggelos, National and Kapodistrian University of Athens
43. Gavalakis Lampros, University Gustave Eiffel
44. Georgousaki Chrysoula, National and Kapodistrian University of Athens
45. Giannakaras Dimitrios, National and Kapodistrian University of Athens
46. Gianniotis Panagiotis, National and Kapodistrian University of Athens
47. Giannopoulos Apostolos, National Technical University of Athens
48. Gkzazgka Natalia, National and Kapodistrian University of Athens
49. Gketsou Stefania, National Technical University of Athens
50. Gkouskos Charalampos, National and Kapodistrian University of Athens
51. Gkrekas Nikolaos, University of Thessaly
52. Gomatou Anastasia, National Technical University of Athens
53. Gregoriades Vassilis, National Technical University of Athens
54. Gypari Alexandra, University of Oxford

55. Hmadi Antonios, National Technical University of Athens
56. Holevas Minas, Aristotle University of Thessaloniki
57. Iliopoulou Marina, National and Kapodistrian University of Athens
58. Ispikoudi Eleni, National Technical University of Athens
59. Kalaitzis Stefanos, National Technical University of Athens
60. Kalamaras Eleftherios, Technical University of Crete
61. Kalogirou Antonios, National Technical University of Athens
62. Kampoukou Angeliki, National and Kapodistrian University of Athens
63. Kanellopoulos Vasileios, National Technical University of Athens
64. Karalis Nektarios, National Technical University of Athens
65. Karvounidou Ioanna, National and Kapodistrian University of Athens
66. Katavolos Aristides, National and Kapodistrian University of Athens
67. Katsadouris Christos, National and Kapodistrian University of Athens
68. Katsampakos Antonios, National Technical University of Athens
69. Katsantonis Vaggelis, National and Kapodistrian University of Athens
70. Katsimpas Georgios, Harbin Engineering University
71. Katsivelos Christos, University of Patras
72. Katsoulis Elias, East Carolina University
73. Kavvadias Ioannis, National Technical University of Athens
74. Kazazis Iason, National and Kapodistrian University of Athens
75. Keskos Nikolaos, National Technical University of Athens
76. Kolountzakis Nikos, University of Crete
77. Konstantos Konstantinos, York University
78. Kontogianni Dorothea, National Technical University of Athens
79. Koustas Stefanos, National and Kapodistrian University of Athens
80. Kravaris Cosmas, Princeton University
81. Kyriaki Kyriaki, National Technical University of Athens
82. Liakopoulos Dimitris-Marios, University of Crete

83. Lolis Michalis, Texas A&M University
84. Loulakis Michail, National Technical University of Athens
85. Magdalas Daniel, National and Kapodistrian University of Athens
86. Makris Athanasios, National and Kapodistrian University of Athens
87. Maliachoustas Vassilis, National Technical University of Athens
88. Manoussakis Antonios, Technical University of Crete
89. Marda Alkmini, National and Kapodistrian University of Athens
90. Mastoura Christina-Thaleia, National Technical University of Athens
91. Mercourakis Sophocles, National and Kapodistrian University of Athens
92. Metallinou Angeliki, National and Kapodistrian University of Athens
93. Metaxas Dimitris, National Technical University of Athens
94. Mitsopoulos-Koukas Stylianos, National Technical University of Athens
95. Motakis Pavlos, York University
96. Mourgoglou Mihalis, University of the Basque Country & Ikerbasque
97. Nieris Ioannis, National and Kapodistrian University of Athens
98. Nikolakopoulos Dimitrios, University of Tennessee
99. Nikolidaki Aikaterini, National Technical University of Athens
100. Nikopoulos Kosmas, University of Crete
101. Noulellis Stavros, National Technical University of Athens
102. Nousia Maria-Eleni, National Technical University of Athens
103. Ntalampekos Dimitrios, Stony Brook University
104. Oikonomou Konstantinos, National and Kapodistrian University of Athens
105. Oikonomou Vasileios-Nektarios, University of Missouri
106. Panagiotopoulos Aristotelis, Kurt Godel Research Center, University of Vienna
107. Pandis Christos, National and Kapodistrian University of Athens
108. Pantelakis Andreas, National and Kapodistrian University of Athens
109. Papadopoulos Georgios, National Technical University of Athens
110. Papadopoulos Nikolaos, National Technical University of Athens



111. Papadopoulou Souzana, University of Crete
112. Papageorgiou-Kafka Aikaterini, University of Bonn
113. Papaspyrou Iasonas-Iraklis, National Technical University of Athens
114. Papastergis Panagiotis, National Technical University of Athens
115. Paraskevas Ioannis-Apollon, National and Kapodistrian University of Athens
116. Paschalis Miltiadis, National and Kapodistrian University of Athens
117. Pasiou Niovi-Paraskevi, National and Kapodistrian University of Athens
118. Patsis Theodoros, National Technical University of Athens
119. Patsourou Anastasia, National Technical University of Athens
120. Petrakis Minos, Technical University of Crete
121. Pirounis Leonidas, National and Kapodistrian University of Athens
122. Plakatouras Christos, National Technical University of Athens
123. Plaskasovitis Alkis, National Technical University of Athens
124. Ploumidis Petros, University of Toronto
125. Prodromidis Kyprianos-Iason, Princeton University
126. Prokopou-Chouliara Maria-Ioanna, National Technical University of Athens
127. de Rancourt Noé, Université Lille
128. Repousis Charalambos, National Technical University of Athens
129. Riga Christina, University of Patras
130. Roupa Paraskevi, National and Kapodistrian University of Athens
131. Rozos Marios, National Technical University of Athens
132. Sakellaridis Yiannis, Johns Hopkins University
133. Saoungkos Alexios, National Technical University of Athens
134. Sarakis Filippos-Georgios, National Technical University of Athens
135. Sari Bünyamin, University of North Texas
136. Sisse Angelos-Lamin, National and Kapodistrian University of Athens
137. Skouras Stamatios, National and Kapodistrian University of Athens
138. Smirlis George, National Technical University of Athens

139. Sotiriadis Pavlos, National Technical University of Athens
140. Statha Athanasia, National Technical University of Athens
141. Stavrakakis Manolis, National and Kapodistrian University of Athens
142. Sykavaridou Despina, University of Thessaly
143. Theofrastou Nestos, National Technical University of Athens
144. Theotokatos George, National Technical University of Athens
145. Theotokatos Konstantinos, National and Kapodistrian University of Athens
146. Thomou Maria, National Technical University of Athens
147. Tsantilas Theofilos, National Technical University of Athens
148. Tselos Ioannis, National Technical University of Athens
149. Tsiapas Georgios, National and Kapodistrian University of Athens
150. Tsirivas Nikolaos, University of Thessaly
151. Tsopeles Spyridon, National Technical University of Athens
152. Tsoukalas Nikolas, National Technical University of Athens
153. Tsourounaki Elpida, Aristotle University of Thessaloniki
154. Tyros Konstantinos, National and Kapodistrian University of Athens
155. Tziotziou Natalia, National Technical University of Athens
156. Vakeroudis Stavros, Athens University of Economics and Business
157. Valettas Petros, University of Missouri, Columbia
158. Vasilopoulos Konstantinos, National Technical University of Athens
159. Vavoudi Stella, National and Kapodistrian University of Athens
160. Vlachou Ioanna, National Technical University of Athens
161. Yannakakis Nikolaos, National Technical University of Athens
162. Zacharis Asterios, National and Kapodistrian University of Athens
163. Zachou Georgia, National Technical University of Athens
164. Zafeiriou Laios, Aristotle University of Thessaloniki
165. Zoi Stefania-Maria, University of West Attica
166. Zonitsa Apostolia, National Technical University of Athens