

MICOPAM 2024 – Conference Program Schedule
The 7th Mediterranean International Conference of Pure & Applied
Mathematics and Related Areas
Antalya-TURKEY, October 26–29, 2024

Conference Venue

Sherwood Dreams Resort Hotel (Ultra All Inclusive), Antalya, TURKEY

Important Notes

- The Conference will be held as a hybrid event, including both physical and online presentations.
 - Time zone for the conference is GTM +3 (Istanbul time).
 - The Halls 1-2 represent the physical rooms in the conference venue.
- The Virtual Hall represents the class opened in the platform used for online presentations.
- The talks of the invited speakers will also be available in the Virtual Hall for online participants to follow them.

October 26, 2024 (Saturday)

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| 10:00 – 12:30 | Registration | | |
| | Parallel Sessions | | |
| | Hall 1 Chairman: Abdelmejid Bayad | Hall 2 Chairman: Mihaela Ribičić Penava | Virtual Hall (Online) Chairman: Damla Gun |
| 10:30 – 10:40 | Speaker: Emil Khalilov Title of Talk: On the relationships between prime ideals related to an ideal and radical ideals in a commutative ring | Speaker: Niyazi Uğur Koçkal Title of Talk: Estimation of behavior of composite materials under aggressive conditions | Speaker: Veerabhadraiah Lokesha Title of Talk: Contemporary expansion in the Topological indices |
| 10:40 – 10:50 | Speaker: Mehmet Ali Özarslan Title of Talk: Certain families of trivariate Mittag-Leffler functions and corresponding fractional calculus | Speaker: Mustafa Gurhan Yalcin Title of Talk: The importance of regression analysis in heavy metal content | Speaker: Syeda Noor Fathima Title of Talk: Modular forms and its application |
| 10:50 – 11:00 | Speaker: Nazim I. Mahmudov Title of Talk: Kalman type criterion for controllability of second order systems with damping term | Speaker: Asude Ozturk Title of Talk: Logit regression modelling of the support for women in working life survey | Speaker: Rabia Zengin Title of Talk: Locality of cyclic codes whose subcodes are negacyclic codes with length $q+1$ and 2 for $q \equiv 1 \pmod{4}$ |
| 11:00 – 11:10 | Speaker: Pembe Sabancıgil Title of Talk: Bernstein-Durrmeyer operators providing a better approximation on $[1/3, 2/3]$ | Speaker: Fusun Yalcin Title of Talk: Examining the differences between the use of logit and probit regression models with the support for working women survey | Speaker: Erkan Agyuz Title of Talk: Rate of convergence by the integral operators including Euler type polynomials |
| 11:10 – 11:20 | Speaker: Mustafa Kara Title of Talk: New modification of Riemann-Liouville fractional integral type Bernstein-Kantorovich operators | Speaker: Sude Yalcin Title of Talk: Between 2008 and 2022, distribution of individuals receiving services from physicians by gender and a statistical approach | Speaker: Aynur Keskin Kaymakçı Title of Talk: MBK-open Sets |

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| 11:20 – 11:30 | Coffee Break | | |
| | Parallel Sessions | | |
| | Hall 1 Chairman: Ayse Yilmaz Ceylan | Hall 2 Chairman: Jerzy Gawinecki | Virtual Hall (Online) Chairman: Damla Gun |
| 11:30 – 11:40 | Speaker: Rahime Dere Title of Talk: A family of some special polynomials | Speaker: Mika Koskenoja Title of Talk: A comparison principle for the distributional Levi form | Speaker: Seda Öztürk Title of Talk: On parabolic class number of some homogeneous principal congruence subgroup of the modular group |
| 11:40 – 11:50 | Speaker: Neslihan Kilar Title of Talk: Derivatives of degenerate Peters-type Simsek polynomials of the second kind | Speaker: Niyazi Uğur Koçkal Title of Talk: Relationship regarding compatibility between matrix and fiber | Speaker: Julije Jakšetić Title of Talk: Jensen's inequality for divided differences |
| 11:50 – 12:00 | Speaker: Buket Simsek Title of Talk: The impact of the interaction of big data and artificial intelligence on medical fields | Speaker: Betul Unal Title of Talk: The signal analysis, obtained with the developed nitrogen-doped graphene electrode | Speaker: Dragana Kordić Title of Talk: Converses of Hardy type inequalities |
| 12:00 – 12:10 | Speaker: Simge Yilmaz Title of Talk: Charlier collocation method for Riccati differential equations | Speaker: Hamdullah Başaran Title of Talk: Berezin radius inequalities with the partial isometry operator | Speaker: Rolf Sören Kraußhar Title of Talk: Some new insights on octonionic Bergman spaces |
| 12:10 – 12:20 | Speaker: Dudu Şeyma Kun Title of Talk: On Bézier-type curves | Speaker: Ismail Naci Cangul Title of Talk: Effect of Edge Addition on Reduced Second Zagreb Index | Speaker: Chouaib Khattou Title of Talk: Some arithmetic properties of Bernoulli numbers of higher order |
| 12:20 – 13:45 | Lunch Break | | |
| | Invited Talks | | |
| | Hall 1 Chairman: Yilmaz Simsek | | |
| 13:45 – 14:10 | Invited Speaker: Gradimir V. Milovanović Title of Talk: Orthogonality in the complex plane | | |
| 14:10 – 14:35 | Invited Speaker: Daeyeoul Kim Title of Talk: Convolution sums of divisors functions | | |
| 14:35-14:50 | Coffee Break | | |

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| | Parallel Sessions | | |
| | Hall 1 Chairman: Daeyeoul Kim | Hall 2 Chairman: Ahmet Sinan Cevik | Virtual Hall (Online) Chairman: Fusun Yalcin |
| 14:50 – 15:00 | Speaker: Irem Kucukoglu Title of Talk: A study on derivation of finite sums involving a unified presentation of the Peters-type Simsek numbers and polynomials | Speaker: Rumen Uluchev Title of Talk: On a direct result for a family of modified Goodman-Sharma operators | Speaker: Seda Öztürk Title of Talk: Solutions of some special congruence equations by permutation groups |
| 15:00 – 15:10 | Speaker: Elif Cetin Title of Talk: A note on q-type special sums | Speaker: Geno Nikolov Title of Talk: Jacobi polynomials and inequalities of Duffin–Schaeffer type | Speaker: Mine Menekşe Yılmaz Title of Talk: On Korovkin type convergence of the Szasz-type operators involving negative order Bernoulli polynomials |
| 15:10 – 15:20 | Speaker: Jerzy Gawinecki Title of Talk: Lp–Lq time decay estimate for the solution of the Cauchy problem for the system describing linear thermodiffusion in the thermal stresses theory | Speaker: Angel Ivanov Zhivkov Title of Talk: On the short-time dynamics of the Solar system | Speaker: Amel Berhail Title of Talk: Convergence of PDI type Iterative Learning Control for fractional differential equation in the Caputo sense |
| 15:20 – 15:30 | Speaker: Stanislaw Kachel Title of Talk: Global solution to the initial value problem for nonlinear system of equations of thermodiffusion without displacements | | Speaker: Ananthakrishnan Sumedan Title of Talk: An elementary proof of Fermat’s last theorem |
| 15:30 – 16:00 | Welcome Cocktail and Conference Group Photo Shoot (The shoot location: Hall 1) | | |
| 16:00 – 17:40 | Dedication Ceremony Hall 1 - Chairman: Professor Yilmaz Simsek Presentations for Curriculum vitae of Prof. Abdelmejid BAYAD and Professor Yilmaz Simsek’s Talk Title: Historical development of "Dedekind sums" expressed in terms of a special finite sum from "Richard Dedekind" to the present and Prof. Abdelmejid BAYAD’s Talk Title: Relations among zeta-type functions and Jordan, Mirimanoff and Thacker functions | | |
| 19:30 | Gala Dinner | | |

October 27, 2024 (Sunday)

10:00 – 12:30

Registration

Invited Talks

Hall 1

Chairman: Gradimir V. Milovanović

11:00 – 11:25

Invited Speaker: **Dora Pokaz**

Title of Talk: Several generalizations of the Hardy-type inequality

11:25 – 11:35

Coffee Break

Parallel Sessions

Hall 1

Chairman: Gradimir V. Milovanović

Hall 2

Chairman: Öznur Kulak

Virtual Hall (Online)

Chairman: Rahime Dere

11:35 – 11:45

Speaker: **Miodrag Spalevic**

Title of Talk: On generalized averaged Gaussian quadrature rules

Speaker: **Ismail Naci Cangul**

Title of Talk: Degree based topological indices of Archimedean graphs of type (4,6,12)

Speaker: **Yahya Çin**

Title of Talk: k-hypergeometric polynomials

11:45 – 11:55

Speaker: **Stefan Spalevic**

Title of Talk: A new class of quadrature rules for estimating the error in Gauss quadrature

Speaker: **Ahmet Sinan Cevik**

Title of Talk: Is there any relationship between minimality and multiset dimensions?

Speaker: **Kristina Krulić Himmelreich**

Title of Talk: Hardy type inequalities and Hermite's interpolating polynomial

11:55 – 12:05

Speaker: **Aleksandar V. Pejcev**

Title of Talk: On error bounds of Gaussian quadrature formulae with Legendre weight function for analytic integrands

Speaker: **Sithembele Nkonkobe**

Title of Talk: Combinatorial interpretation of some generalized geometric polynomials

Speaker: **Ksenija Smoljak Kalamir**

Title of Talk: New bounds for generalized Steffensen's inequality using Hermite interpolation

12:05 – 12:15

Speaker: **Eda Yuluklu**

Title of Talk: Remarks on Hermite-Based Peters-type Simsek polynomials

Speaker: **Evgeniya Burtseva**

Title of Talk: On boundedness of the Riesz potential in Morrey–Orlicz type spaces

Speaker: **Gorana Aras-Gazić**

Title of Talk: Generalization of the Jensen-Steffensen inequality and majorization in the context of divided differences

12:15 – 12:25

Speaker: **Edison Fausto Cuba Huamani**

Title of Talk: Existence of steady solutions to active scalar equations

Speaker: **Ismail Naci Cangul**

Title of Talk: Randic Index of Vertex-Switching of Some Graph Classes

Speaker: **Khadidja Aicha Kada**

Title of Talk: A Juvenile-Adult population model to understand the European grapevine moth dynamics

12:25 – 14:30

Lunch Break

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| | Invited Talk | |
| | Hall 1 Chairman: Irem Kucukoglu | |
| 15:30 – 15:55 | Invited Speaker: Öznur Kulak Title of Talk: On the multilinear multipliers theory | |
| 15:55 – 16:10 | Coffee Break | |
| | Parallel Sessions | |
| | Hall 1 Chairman: Dora Pokaz | Virtual Hall (Online) Chairman: Elif Sukruoglu |
| 16:10 – 16:20 | Speaker: Jesus Cruz Guzman Title of Talk: The duality concept in the category of graded commutative algebras | Speaker: Zineb Bellabess Title of Talk: Weak solutions of ρ -Caputo fractional derivatives with variable order |
| 16:20 – 16:30 | Speaker: Daniyar Kozybayev Title of Talk: Novikov coalgebras | Speaker: Anamarija Perušić Pribanić Title of Talk: Bounds of Hermite-Hadamard-type for generalizations of Steffensen's inequality via Lidstone's polynomials |
| 16:30 – 16:40 | Speaker: Altyngul Naurazbekova Title of Talk: Tame automorphisms of the free dual Leibniz algebra of rank 2 | Speaker: Faruk Kaplan Title of Talk: A Brief Study About Binomial Transforms of Generalized k- Tetranacci Sequences |
| 16:40 – 16:50 | Speaker: Malesela Clifford Kekana Title of Talk: Accuracy estimation of the numerical solution for chaotic regime of the pendulum with external and parametric excitation | Speaker: Deepasree S. Kumar Title of Talk: Computation of NM-polynomial and topological indices for cycle related graphs |
| 16:50 – 17:00 | Speaker: İrem Adıyaman Title of Talk: Multilinear Multipliers Theorems for the spaces of functions with Wavelet Transform in amalgam Spaces | Speaker: Nirupadi K. Title of Talk: V L Index of Vertex Switching of Some Classes Graph |
| 17:00 – 17:10 | Speaker: Ahmet Altürk Title of Talk: On the edge effects in wavelets | |
| 17:10 – 17:20 | Speaker: Mehmet Akif Özçoban Title of Talk: EEG Coherence as a Biomarker for Detecting Mild Traumatic Brain Injury: A Study of Functional Connectivity Reductions | |

October 28, 2024 (Monday)

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| 10:30 – 12:30 | Registration | | |
| | Invited Talk | | |
| | Hall 1 (Physical) + Virtual Hall (Online) Chairman: Daeyeoul Kim | | |
| 10:30 – 10:55 | Invited Speaker: Mihaela Ribić Penava Title of Talk: Hermite–Hadamard type inequalities with applications | | |
| 10:55 – 11:15 | Invited Speaker: Manuel López-Pellicer Title of Talk (Online): Covering properties in spaces of continuous functions | | |
| 11:15 – 11:30 | Coffee Break | | |
| | Parallel Sessions | | |
| | Hall 1 Chairman: Miodrag Spalevic | Hall 2 Chairman: Rumen Uluchev | Virtual Hall (Online) Chairman: Elif Cetin |
| 11:30 – 11:40 | Speaker: Damla Gun Title of Talk: Relations among multiple variables polynomials, Fibonacci and Lucas numbers | Speaker: Erik-Jürgen Määrits Title of Talk: An iterated collocation-type method for linear fractional differential equations | Speaker: Özlem Karaağaçlı Title of Talk: Dickson collocation method to solve a model regarding pollution of a system of lakes |
| 11:40 – 11:50 | Speaker: Elif Sukruoglu Title of Talk: Identities derived from applications of Indefinite sum operator to the Mirimanoff polynomials | Hall 2 Poster Session Chairman: Rumen Uluchev | Speaker: Fatma Zürcü Yetiş Title of Talk: Non-polynomial divided differences and their properties |
| | | Speaker: Khaldoun Al-Zoubi Title of Poster: On graded S-semiprime ideals of commutative graded rings | |
| 11:50 – 12:00 | Speaker: Ezgi Polat Title of Talk: Evaluation special values of certain class of polynomials via linear transformation and inverse matrix formulas | Speaker: Mohammed Al-Dolat Title of Poster: New general upper bounds for the numerical Radii of operators in Hilbert spaces | Speaker: Sara Youcef Achira Title of Talk: Theoretical study of Bernoulli wavelet and block-pulse functions operational matrix algorithm and its application to the stochastic equation |
| 12:00 – 12:10 | Speaker: Elif Bozo Title of Talk: Remarks on recent advance in Derangement numbers and polynomials | Speaker: Mohammed El Amine Kissi Title of Poster: Analysis of an age-structured model for the Spread of Xylella Fastidiosa in olive trees | Speaker: Sanja Kovač Title of Talk: Ostrowski–Grüss Type Inequality of the Chebyshev Functional with an Application |
| 12:10 – 12:20 | Speaker: Ecem Ateş Title of Talk: Remarks on Dedekind zeta function involving Riemann zeta function and Pell equation on modular group | | |
| 12:20 – 13:50 | Lunch Break | | |
| 14:00 – 19:00 | An excursion to some historical places of Antalya, the city center and the Akdeniz University campus | | |

October 29, 2024 (Tuesday)

Invited Talk

Virtual Hall (Online)
Chairman: Neslihan Kilar

09:30 – 09:50 **Invited Speaker:** [Tomislav Burić](#)
Title of Talk (Online): Asymptotic analysis of the compound means with applications

09:50 – 10:00 **Coffee Break**

Parallel Sessions

Hall 1
Chairman: Abdelmejid Bayad

Virtual Hall (Online) + Hall 2 (Physical)
Chairman: Rahime Dere

Virtual Hall 2 (Online)
Chairman: Elif Cetin

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| 10:00 – 10:10 | Speaker: Mustafa Alkan Title of Talk: A note on palindrome compositions set | Speaker: Nisa Akgöz Title of Talk: Power series statistical convergence of (p, q) -Bleimann, Butzer and Hahn operators | Speaker: Siham Mokhfi Title of Talk: Trace formula for Witt vectors rings |
| 10:10 – 10:20 | Speaker: Irem Kucukoglu Title of Talk: Computational formulas for the polynomials emerging from the integrals of the Poisson-Charlier polynomials | Speaker: Dmitry Kruchinin Title of Talk: Fractals on compositae | |
| 10:20 – 10:30 | Speaker: Neslihan Kilar Title of Talk: Some formulas for ordered Bell polynomials via finite operators | Speaker: Yuriy Shablya Title of Talk: Application of generating functions to calculate the number of words derived from unambiguous context-free grammars | |
| 10:30 – 10:40 | Speaker: Mustafa Alkan Title of Talk: A note on relation between the Fibonacci numbers and the color palindrome compositions | Speaker: Raymond Calvin Ochieng Title of Talk: Bijective mapping in pythagorean triples | |

Closing Ceremony

Hall 1 (Physical) + Virtual Hall (Online)

10:40 – 11:10