MICOPAM 2023 – Conference Program Schedule The 6th Mediterranean International Conference of Pure & Applied Mathematics and Related Areas Paris-FRANCE, August 23-27, 2023

## **Conference Venue**

The talks will take place at the IBGBI building located at 23 Bd de France, 91037 Évry-Courcouronnes. (Simply enter this address on Google Maps to get directions from your hotel)

## **Important Notes**

 $\succ$  The Conference will be held as a hybrid event, including both physical and online presentations.

- Time zone for the conference is GTM +2 (Local time in Paris, France).
- ➢ The Hall 1-3 represents the physical rooms in the conference venue.

 $\succ$  The Virtual Hall represents the class opened in the platform used for online presentations.

> The talks of the invited speakers whose presentation is online will be projected to the board at the Hall 1, for physical participants to follow them.

> The other online presentations in the Virtual Hall will be projected to the board at the Hall 3, for physical participants to follow them.

## August 23, 2023 (Wednesday)

09:00 – 11:30	Registration			
	Invited Talks (Virtual)			
	Virtual Hall + Hall 1 Chairman: Neslihan Kilar			
09:30 – 09:45	Invited Speaker: Subuhi Khan Title of Talk (Online): Umbral convolutions of hypergeometric functions			
09:45 – 10:00	Invited Speaker: Veerabhadraiah Lokesha Title of Talk (Online): Focus on Connectivity indices and its impact			
10:00 - 10:30	Welcome Speech of the President of the Université d'Evry Hall 1 (Physical) - Virtual Hall (Online)			
10:30 - 10:45	Coffee Break			
	Invited Talks (Virtual)			
	Virtual Hall + Hall 1 Chairman: Neslihan Kilar			
10:45 – 11:00	Invited Speaker: Manuel López-Pellicer Title of Talk (Online): Weakly analytic sets in locally convex spaces			
11:00 – 11:15	Invited Speaker: Gradimir V. Milovanović Title of Talk (Online): Complex orthogonality on the semicircle and numerical integration and differentiation			

11:15 - 11:30	A Short Break				
	Parallel Sessions (All Physical)				
	Hall 1	Hall 3 Chairman Nealiben Kilor			
11:30 – 11:40	Speaker: Beyza Çetin Title of Talk: A Boubaker matrix method for solving higher-order differential equations with constant coefficients	Speaker: Ömer Halil Çolak Title of Talk: Wavelet-based analysis of the effect of electrode positions on the sEMG spectrum			
11:40 - 11:50	Speaker: Simge Yılmaz Title of Talk: Charlier polynomial solutions of Lane-Emden differential equations	Speaker: Esra Süzen Title of Talk: Analyze of EEG and Eye-Tracking on Tennis HEC Training			
11:50 – 12:00	<b>Speaker:</b> Özlem Karaağaçlı <b>Title of Talk:</b> Dickson collocation method to solve first-order differential equations which variable delays	<b>Speaker:</b> Ayhan Şavklıyıldız <b>Title of Talk:</b> Frequency domain normalizations of EEG signals			
12:00 - 12:10	Speaker: Gamze Yıldırım Title of Talk: A collocation method based on Lerch polynomials for solving the Hantavirus infection model	<b>Speaker:</b> Nilay Selma Şavklıyıldız <b>Title of Talk:</b> Effect of vector control algorithms on motor types			
12:10 - 13:30	Lunch Break				
14:00 – 16:00	Dedication Ceremony Hall 1 (Physical) - Virtual Hall (Online) (Dedication Ceremony, related speeches, and Prof. Yilmaz SIMSEK's Presentation) Title of Professor Simsek's Talk: On the relations derived from consideration of generating functions for sum of higher powers of inverse binomial coefficients.				
16:00 - 16:10	Conference Group Photo Shoot (The shoot location: Hall 1)				
	Invited Talk (Physical)				
	Hall 1 - Chairman: Rolf Sören Kraußhar				
16:20 – 16:45	Invited Speaker: Satish lyengar Title of Talk: Inference for first passage times of the Feller process				
16:45 – 17:00	Coffee Break				
	Invited Talks (Physical)				
	Hall 1 Chairman: Daeyeoul Kim				
17:00 – 17:25	Invited Speaker: Burcin Simsek				
17:25 – 17:50	Invited Speaker: Dora Pokaz Title of Talk: Generalizations of the Hardy type inequality via new Green functions and interpolating polynomials				
17:50 - 18:15	Invited Speaker: Marija Stanic Title of Talk: Anti-Gaussian quadrature rules related to polynomials orthogonal on the unit semicircle				
18:15 – 18:40	Invited Speaker: Figen Öke Title of Talk: Extensions of valuations with greater rank				

August 24, 2023 (Thursday)					
09:30 – 11:30	Registration				
	Parallel	Sessions (2 Physical +	1 Online)		
	Hall 1 Chairman: Figen Öke	Hall 2 Chairman: Ahmet Altürk	Virtual Hall + Hall 3 Chairman: Elif Çetin		
08:30 – 08:40	<b>Speaker:</b> Abdelkader Lakmeche <b>Title of Talk:</b> Leukemia disease model	<b>Speaker:</b> Dilek Söylemez Özden <b>Title of Talk:</b> Some results for Bernstein type rational operators	<b>Speaker:</b> Mihaela Ribičić Penava <b>Title of Talk (Online):</b> Generalizations of Euler-Grüss type inequalities		
08:40 – 08:50	Speaker: Mohamed Helal Title of Talk: Mathematical analysis for a time delay model of Alzheimer's disease	<b>Speaker:</b> Dae Sik Lee <b>Title of Talk:</b> Degenerate q- derangement numbers and polynomials	Speaker: Melisa Gaygisiz Title of Talk (Online): Mathematical model selection in determining the course of infectious diseases		
08:50- 09:00	Speaker: Fatemah Mofarreh Title of Talk: Ruled surfaces in spacetime case characterized by a stationary disteli-axis	Speaker: Ayşe Yılmaz Ceylan Title of Talk: A new approach to deriving identities for the dual Bernstein basis functions	Speaker: Mevlut Caylak Title of Talk (Online): An investigation on last square method in non-linear mathematical models		
09:00 – 09:10	Speaker: TBA Title of Talk: TBA	Speaker: TBA Title of Talk: TBA	Speaker: Mohammed Abeidallah Title of Talk (Online): Spatial data case: conditional hazard estimate by the local linear method		
	Invited Talk (Physical)				
00.25 10.00	Hall 1 Chairman: Satish Iyenga	ar			
09:35 - 10:00	<b>Title of Talk:</b> Generating functions for superoscillating functions and recurrence relations				
10:00 - 10:15		Coffee Break			
		Invited Talk (Physical	)		
10:15 10:40	Hall 1 Chairman: Abdelmejid Bayad				
10:15 - 10:40	Invited Speaker: Taekyun Kim Title of Talk: Identities on degenerate hyperharmonic numbers				
	Parallel	Parallel Sessions (2 Physical + 1 Online)			
	Hall 1 Chairman: Nazim I. Mahmudov	Hall 2 Chairman: Ayşe Yılmaz Ceylan	Virtual Hall + Hall 3 Chairman: Elif Çetin		
10:40 – 10:50	<b>Speaker:</b> İlkay Onbaşı Elidemir <b>Title of Talk:</b> On ω-(p,q) Sturm-Liouville Problem and Their Orthogonal Solutions	<b>Speaker:</b> Ahmet Altürk <b>Title of Talk:</b> Boundary Handling for Biorthogonal Wavelets	Speaker: Mohamed Djemaa Sadoun Title of Talk (Online): On inference in generalized integer-valued GARCHX models with structural changes		

10:50 – 11:00	<b>Speaker:</b> Ertan Akacan <b>Title of Talk</b> : ((p,q)ω)-Hahn Difference Operator and Some Important Characterizations	Speaker: İsmail Uğur Tiryaki Title of Talk: On a sequence of positive linear operators related to squared- Durrmeyer operators	<b>Speaker:</b> Frank Vega <b>Title of Talk (Online):</b> On Solé and Planat criterion for the Riemann Hypothesis		
11:00 – 11:10	Speaker: Hye Kyung Kim Title of Talk: Degenerate trigonometric functions arising from p-adic integrals on Z_p	Speaker: Mahesh Kumar Title of Talk: Approximate solution to Riemann problem arising in hyperbolic conservation equation	<b>Speaker:</b> Frank Vega <b>Title of Talk (Online):</b> NP on Logarithmic Space		
11:10 – 11:20	Speaker: TBA Title of Talk: TBA	Speaker: Chen Xuan Title of Talk: The maths of a photo induced hydrogel swimming robot: nonsmooth forcing dynamics	<b>Speaker:</b> Chouaib Khattou <b>Title of Talk:</b> Some arithmetic properties of Bernoulli numbers of higher orders		
11:20 - 11:50	A Break				
	Invited Talk (Virtual)				
	Virtual Hall + Hall 1 Chairman: Abdelmeiid Bayad				
11:50 – 12:00	Invited Speaker: Chandrashekar Adiga Title of Talk (Online): S. Ramanujan – The Mathematician and his Legacy				
12:00 - 13:30	Lunch Break				
	Invited Talks (Physical)				
	Hall 1 Chairman: Abdelmejid Bayad				
13:30 - 13:55	Title of Talk: On Vietoris convolution triangles				
13:55 – 14:20	<b>Invited Speaker: Marc-Antoine Coppo</b> <b>Title of Talk:</b> Bendersky-Adamchik constants, hyperfactorial functions, and Ramanujan summation of divergent series				
14:20 – 14:45	Invited Speaker: Hussein Mourtada Title of Talk: Integer partitions, graphs and monomial ideals				
14:45 – 15:10	Invited Speaker: C. K. Subbaraya Title of Talk: Convective Heat Transfer in an Enclosure in the Presence of a Magnetic Field				
15:10 – 15:50	Coffee Break				
	Parallel Sessions (2 Physical + 1 Online)				
	Hall 1 Chairman: Isabel Cação	Hall 2 Chairman: İsmail Uğur Tiryaki	Virtual Hall + Hall 3 Chairman: Neslihan Kilar		
15:50 – 16:00	Speaker: Elif Çetin Title of Talk: Generalized Simsek Sums and Related Certain Family of Finite Sums	Speaker: Dmitriy Dolgy Title of Talk: Interval decision-making problems	<b>Speaker:</b> Eylem Öztürk <b>Title of Talk (Online):</b> On Brief History and certain aspects of Cahn-Hilliard Equations		

16:10 – 16:20	Speaker: Sofiane Abdelhamid Atmani Title of Talk: Ramanujan Congruences for partition functions associated with Eta quotients modulo prime numbers	<b>Speaker:</b> Rükan Genç Altürk <b>Title of Talk:</b> Nanomaterial Design for Engineering Applications	<b>Speaker:</b> Mounir Hajli <b>Title of Talk (Online):</b> On the theory of zeta functions and their applications	
16:20 – 16:30	Speaker: Louis Auffret Title of Talk: Catalan, Fuss- Catalan and Raney numbers: Generic combinatorial interpretation and extended definition	Speaker: Mohamed Mehbali Title of Talk: A Hybrid Genetic Algorithm for the Three-index Assignment Problem	<b>Speaker:</b> Dae San Kim <b>Title of Talk (Online):</b> Stirling numbers associated with sequences of polynomials	
16:30 – 16:40	<b>Speaker:</b> Aynur Keskin Kaymakci <b>Title of Talk:</b> Further Properties of a*-I-Open Sets and a*-I-Continuity	Speaker: TBA Title of Talk: TBA	<b>Speaker:</b> Rahime Dere <b>Title of Talk (Online):</b> Some relations for the Pidduck Polynomials	
August 25, 2023 (Friday)				

	Invited Talks (Physical)					
	Hall 1 Chairman: Mehn	net Ali Özarslan				
09:40 - 10:05	Invited Speaker: Secil C Title of Talk: S-versions	C <mark>eken</mark> of some module theore	tic concepts			
10:05 - 10:15	Coffee Break					
	Invited Talks (Physical)					
	Hall 1 Chairman: Taekyun Kim					
10:15 - 10:40	Invited Speaker: Nazim I. Mahmudov Title of Talk: Discrete time mean-field optimal control problems: Stochastic maximum principle					
10:40 - 11:05	Invited Speaker: Daeyeoul Kim Title of Talk: Iterated sociable number and stable numbers					
11:05 – 11:30	Invited Speaker: Mehmet Ali Özarslan Title of Talk: On the approximation to fractional calculus operators with multivariate Mittag- Leffler function in the kernel					
	Poster S Poster Hall - Chair	Session man: Erkan Agyuz	An C Virtual Hall +	<b>Online Session</b> Hall 3 - Chairman: Neslihan Kilar		
Poster 1 Presenter: Fares AlazemiTitle of Poster 1: Wasserstein bounds11:30 – 12:00in the CLT of the MLE for the drift coefficient of a stochastic partial differential equation	Poster 1 Presenter: Fares Alazemi Title of Poster 1: Wasserstein bounds	Poster 2 Presenter: Mansoor H. Alshehri Title of Poster 2: Investigation of	11:30 - 11:40	Speaker: Dmitry Kruchinin Title of Talk (Online): Some Properties of the Faber Polynomials		
	copper filled carbon nanotubes	11:40 – 11:50	Speaker: Yuriy Shablya Title of Talk (Online): Bijection between simple directed lattice paths and AND/OR tree structures			

11:30 – 12:00	Poster 1 Presenter: Fares Alazemi Title of Poster 1: Wasserstein bounds in the CLT of the MLE for the drift coefficient of a stochastic partial differential equation	Poste Mans Title Inv coppe	er 2 Presenter: oor H. Alshehri e of Poster 2: estigation of er filled carbon hanotubes	11:50 – 12:00	Speaker: Yuriy Shablya Title of Talk (Online): Relationship between combinatorial sets, generating functions and combinatorial generation algorithms
12:00 - 13:30			Lunch	Break	
	Pai	rallel	Sessions (2	Physical + 1	Online)
	Hall 1 Chairman: Mustafa A	lkan	Ha Chairman:	ll 2 Erkan Agyuz	Virtual Hall + Hall 3 Chairman: Elif Çetin
14:00 – 14:10	Speaker: Elif SukruogluTitleTitle of Talk: A note onTitleGeneralized Szâsz-Schurer-inBaskakov operator with theirapplications		Speaker: N Title of Talk: Co involving res functions f cond	Johyun Kim onvolution sums tricted divisor for coprime itions	Speaker: Neda Lovričević Title of Talk (Online): Taylor interpolation formula and Jensen-type inequalities' improvements
14:10 – 14:20	Speaker: Damla Gün Title of Talk: Relations of exponential Euler spline associated with special numbers and polynomials		Speaker: Soungdouk Lee Title of Talk: Some formula by convolution sums and the inverse divisor functions for coprime conditions		<b>Speaker:</b> Omar Y. Khattab <b>Title of Talk (Online):</b> giα-Expansion Mappings in Topological Spaces
14:20 – 14:30	Speaker: Ezgi Polat Title of Talk: Some certain families of special polynomials derive from linear matrix form of transformation the using of rational numbers		Speaker: Jun Cao Title of Talk: Mathematical modeling and numerical simulation on tornado dynamics		Speaker: Mehnaz Haneef Title of Talk (Online): Degenerate general bivariate Appell polynomials: Properties and Applications
14:30 – 14:40	Speaker: TBA Speak Title of Talk: TBA Title of		er: TBA Talk: TBA	Speaker: Şüayip Yüzbaşı Title of Talk (Online): A new approximation method for Multi- Pantograph type delay differential equations using Hermite polynomials	
	Parallel Sessions (All Physical)				
	Hall 1 Chairman: Daeveoul Kim		Kim	Hall 2 Chairman: Rükan G. Altürk	
15:00 – 15:10	Speaker: Lahcen Oussi Title of Talk: Remarks on Degenerate Simsek Numbers		Spe Title of Talk: Method for So Volterra Inte	aker: Zelal Temel Second-Order Numerical olving Singularly Perturbed egro-differential Equation	
15:10 – 15:20	Speaker: Irem Kucukoglu Title of Talk: Closed-form evaluation of some series involving the Dirichlet characters and the numbers counting Lyndon words		Speal Title of Talk: So sup	<b>ker:</b> Andreea Fulga ome fixed point theorems in per-metric space	

15:20 – 15:30	<b>Speaker:</b> Neslihan Kilar <b>Title of Talk:</b> Identities on Simsek numbers: Approach to generating functions with Faà di Bruno's formula		Speak Title of Talk: Interpolation in	er: Ryotaro Okazaki An application of Hermite Explicit Equation of Algebraic Curves
15:30 – 15:40	Speaker: Elif Bozo Title of Talk: Formulas derived from relationships between derangement numbers and the Peters-type Simsek numbers of the second kind		Ti	<b>Speaker:</b> TBA <b>tle of Talk:</b> TBA
15:40 – 15:50	Speaker: Irem Kucukoglu Title of Talk: On Peters-type Simsek numbers and polynomials attached to the Dirichlet character		Speaker: TBA Title of Talk: TBA	
15:50 – 16:00	Speaker: Neslihan Kilar Title of Talk: Observations on asymptotic expressions for combinatorial Simsek numbers		Speaker: TBA Title of Talk: TBA	
16:00 - 16:15	Coffee Break			
	Parallel Sessions (All Physical)			
	Hall 1 Chairman: Jun Cao	Ha Chairman: Ir	all 2 em Kucukoglu	Hall 3 Chairman: Neslihan Kilar
16:15 – 16:25	Speaker: Bayram Bala Title of Talk: Direct and inverse discrete Sturm- Liouville problems with finitely many points of discontinuity	<b>Speaker:</b> M <b>Title of Tall</b> Composition pat	Iustafa Alkan <: Palindrome n Sets and the terns	Speaker: Fusun Yalcin Title of Talk: Recent trends to the problem of heteroscedastity in regression analysis
16:25 – 16:35	Speaker: Abdullah Kablan Title of Talk: Fractional periodic discontinuous Sturm-Liouville problem with eigenparameter in the boundary condition	Speaker: I Title of Talk: recent dev Positive-Lind Involving Spea	Erkan Agyuz A note on the elopment of ear Operators cial Polynomials	Speaker: Berna Cayhan Title of Talk: Regression analysis of chemical compound of Hurma region spring water
16:35 – 16:45	Speaker: Qiu-Ming Luo Title of Talk: The dissections and modular equations for the Ramanujan-Selberg continued fraction	Speaker Title of Talk: ( integers who smaller than a	r: Busra Al Compositions of ose each part is positive integers	Speaker: Özge Özer Atakaoğlu Title of Talk: Using Multivariate Statistical Analyzes in Geochemical Data: Example of Lead-Zinc Deposit
16:45 – 16:55	Speaker: Yonghyeon Jeon Title of Talk: Order reduction mitigating predictor- corrector strategy for fractional differential equations	<b>Speaker:</b> Abo <b>Title of Ta</b> l Functions and	delmejid Bayad I <b>k:</b> Partitions Zetas Functions	Speaker: Caner Atakoğlu Title of Talk: Investigation of the Effect of Supply Methods on Fresh Fruit and Vegetable Product Purchase Prices
16:55 – 17:05	Speaker: TBA Title of Talk: TBA	Speak Title of	<b>cer:</b> TBA <b>Talk:</b> TBA	<b>Speaker:</b> İmge Özer <b>Title of Talk:</b> Data Minimization in Scientific Research

17:05 – 17:15	Speaker: TBA Title of Talk: TBA	Speaker: TBA Title of Talk: TBA	<b>Speaker:</b> Yasemin Leventeli <b>Title of Talk:</b> An example of predicting mass movements with mathematical models: Suluada-Antalya-Turkey		
17:15 – 17:25	Speaker: TBA Title of Talk: TBA	Speaker: TBA Title of Talk: TBA	Speaker: Emine Şükran Okudan Title of Talk: Regression Analysis of Heavy Metal Content of Macroalgae in the Gulf of Antalya		
17:30	<b>Closing Ceremony</b> (Hall 1 + Virtual Hall)				
19:30	<b>Gala Dinner</b> The Ibis Styles Hotel Évry				
August 26, 2023 (Saturday)					
On Free discussion of participants in the spirit of the conference.					
August 27, 2023 (Sunday)					
Excursion from the university campus and city museums individually and with your own participant on your own plan.					

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