One Day Conference at the Department of Mathematics,
Faculty of Science, Ain Shams University, Cairo, Egypt
Saturday 20th July 2024

يُعقد مؤتمر اليوم الواحد بعنوان

اتجاهات متعددة التخصصات في علوم الرياضيات وتطبيقاتها

Multidisciplinary Trends in Mathematical Sciences and its Applications MTMSA2024

تحت رعاية

الأستاذ الدكتور

محمد ضياء زين العابدين

رئيس جامعة عين شمس

الأستاذ الدكتور

محمد رجاء محمد السطوحي

عميد كلية العلوم

وبالتعاون مع

أ.د/ إيمان محمد عبد العظيم

وكيل كلية العلوم لشئون التعليم والطلاب

أ.د/ أمل أحمد مرسى أحمد

وكيل كلية العلوم لشئون خدمة المجتمع وتنمية البيئة

أ.د/ وائل سمير محمود

وكيل كلية العلوم لشئون الدراسات العليا والبحوث

أ.د/ سحر محمد على أبوبكر

رئيس مجلس قسم الرياضيات - كلية العلوم- جامعة عين شمس

و بالتنسيق و دعم من جمعية الرياضيات المصرية /https://egmaths.com

أ.د/ فايد فائق محمد غالب

رئيس مجلس إدارة الجمعية و أستاذ متفرغ – علوم الحاسب بقسم الرياضيات

أ.د/ محمود عبد العاطى

نائب رئيس الجمعية و نائب رئيس الإتحاد الإفريقى للرياضيات و أستاذ الرياضيات التطبيقية جامعة سوهاج

أ.د/ عصام سليمان الصعيدى

أمين صندوق جمعية الرياضيات المصرية و أستاذ متفرغ الرياضيات البحتة بقسم الرياضيات كلية العلوم جامعة عين شمس

One Day Conference for the Department of Mathematics, Faculty of Science, Ain Shams University, Cairo, Egypt
MTMSA2024 - Saturday: July 20 - 2024

The conference is supported by Ain shams University, Faculty of Science with the collaboration of the Egyptian Mathematical Society.

⚜ *Conference Schedule (General Sessions)- Faculty Seminar Hall*

Time	Activity
9:00 --10:00 AM	**Registration**
10:00--11:00 AM	**Opening speech and Quran Recitation** - The conference opening speech by Faculty Dean o **Prof. Dr. Mohamed Ragaa Mohamed Alstohy** - The welcome speech by the vice dean of postgraduate and research affairs o **Prof. Dr. Wael Samir Mahmoud** - The welcome speech by the chairman of the Mathematics Department Council. o **Prof. Dr. Sahar Mohamed Ali Abou Bakr** - The opening speech by the President of the Egyptian Mathematical Society o **Prof. Dr. Fayed F. M. Ghaleb** Honoring and awards distribution for leader professors
11:00—11:30AM	Coffee break
Invited Speakers and keynotes	
11:30 –11:50PM	o **Prof. Dr Mahmud Abd El Aty** Professor of Applied Mathematics, department of Mathematics, Sohag University and Deputy Chair of the Egyptian Mathematical Society, Deputy Chair of the African Union of Mathematics.
11:50--12:10 PM	o **Prof. Dr. Nashat Faried Mohamed Fathy** Emeritus professor of Pure Mathematics, Department of Mathematics, Faculty of Science, Ain Shams University.
12:10--12:30 PM	o **Prof. Dr. Haroun Barakat** Emeritus professor of Statistics, Faculty of Science, Zagazig University.
12:30--12:50 PM	o **Prof. Dr. Mohamed Abdel Latif Ramadan** Emeritus professor of pure Mathematics, Faculty of Science, Menoufia University and a member of the Scientific Committee for Mathematics.
12:50--1 :10 PM	o **Prof. Dr. Samir Saqr** Professor of Mathematics and Dean of the Faculty of Science at New Mansoura University.
1:10--1 :30 PM	o **Prof. Dr. Khaled Saad Mekheimer** Emeritus Professor of Applied Mathematics, Former Vice Dean of Al-Azhar University and Secretary General of the Egyptian Mathematical Society.
1:30 -- 1 :50 PM	o **Prof. Dr. Mohammed Abdel-Megeed** professor of Computer Vision, German University in Cairo GUC.
1:50 -- 2 :15 PM	break
Parallel Sessions	

2:15 -- 3:45 PM	Pure Mathematics *Prof. Dr. Entisarate El-Shobaki Seminar Hall*	Applied Mathematics *Classroom 424-A*	Statistics *Prof. Dr. Mahmoud Khirat Lab*	Computer Science *Dr. Bahaa El-Din Helmy Lab*
Closing Ceremony and photos session (Prof. Dr. Entisarate El-Shobaki Seminar Hall)				

MTMS A2024 Conference Sessions

Session	Pure Mathematics
Location	Prof. Dr. Entisarate El-Shobaki Seminar Hall

chairpersons	Prof. Dr. Nashat Faried
	Prof. Dr. Samir Saqr
	Prof. Dr. Essam Soliman El –Seidy

Time	2:15 -- 3:45 PM

	Author Name	Title
Pure Mathematics	Fawziah Yahya	On N-bipolar soft continuous mappings with application in OMICRON disease Fawziah Yahya, Amira R. Abdel-Malekb, Essam El-Seidy, A.E. Radwanc
	Esraa Alsawaby	On lattice generalizations of bipolar soft rough approximations Esraa Alsawaby, Heba I. Mustafa, Abdelaziz E. Radwan, Ragabia Hussein sallam, Ali, T. S.T.
	Rabab Moustafa	Fractional infimal and supremal convolutions with application Rabab Moustafa, Nashat Farid, H.M.S. Lotfy, H. Abd El Ghafar
	Howayda Saber	Connectivity on multi-pretopological structures and decision-making for COVID-19 Howayda Saber, E.El-Seidy, A.E.Radwan, A.M.Kozae, S.A.El-Sheikh, A.A.El-Atik
	Marwa Gamal	Solving real-life BVPs via the second derivative Chebyshev pseudo-Galerkin method Marwa Gamal, Mamdouh El-Kady, Mohamed Abdelhakem
	Hager Alaa Eldeen	Monic Chebyshev's First Derivative polynomials differentiation matrices for solving Lane-Emden and Ricatti equations Hager Alaa Eldeen, M. El-Kady, and M. Abdelhakem
	Mohiedeen Ahmed	e-subalgebras and e-homomorphisms of PGK2-algebras Mohiedeen Ahmed, Abd El-Mohsen Badawy, Essam El-Seidy, Mohiedeen Ahmed, Ahmed Gaber

Session	Appied Mathematics and Pure Mathematics
Location	Classroom 424A- The auditorium of Prof. Dr. Ahmed Hassan Kashif

chairpersons	Prof. Dr. Fayez Nasif Ibrahim
	Prof. Dr. Nasser Sweilam
	Prof. Dr. Ahmed Mostafa Kamal

Time	2:15 -- 3:45 PM

	Author Name	Title
Applied Math.	Prof. Dr. Fayez Nasif	A comparative study on entropy and thermal performance of Cu/CuO/Fe3O4-based engine oil Carreau nanofluids in PTSCs: a theoretical model for solar-powered aircraft applications Philopatir B. Raafat, Muhammad AbuGhanem, Fayez N. Ibrahim, Ahmed S. Hendy & Mahmoud A. Zaky
	Mohamed mayez	A study on reflexive and quasi-armendariz rings Mohamed mayez sherief
Pure Math.	Shahd Hisham	Optimal strategies in bioeconomic differential games: insight from Chebyshev Tau method Shahd Hisham Alkharaz, Essam El-Seidy
	Nehaya Rashed	Numerical studies of climate change models under piecewise hybrid fractional derivative S. M. Hassan, A. E. Radwan, N. H. Sweilam, S. M. Al-Mekhlafi
	Somaya Mahmoud	Second Kind Chebyshev Polynomials Differentiation Matrices for Solving Differential Problems M. El-kady, M. Abdelhakem
	Maan Talal	Strategies for open-loop Nash equilibrium in differential games: an application of the Picard technique Esam El – Siedy , Shahd H. Alkharaz , Yasmin Adel
	Ahmed M. Abbas	New Spectral Solutions for Some Integral Equations via Legendre's Derivatives Y. H. Youssri, M. El-Kady, M. Abdelhakem

MTMSA2024 Conference Sessions

Session	Statistics and Pure Mathematics
Location	Prof. Dr. Mahmoud Khirat Lab

chairpersons	Prof. Dr. Haroun Barakat Prof. Dr. Nahed Mokhlis Prof. Dr. Adel T. Diab
Time	2:15 -- 3:45 PM

	Author Name	Title
Pure Math.	Shimaa Atef	**Behaviors of Win Stay, Lose Shift strategies in Repeated Games** Shimaa Atef, Essam El-Seidy and Naglaa M. Reda
Statistics	Hend Ali	**Bayes estimation and prediction for linear exponential model with ordered ranked set sampling medical data** Haidy A.Newer, Mostafa M. Mohie El Din, and Hend S. Ali
Statistics	Soad M. A. Bakry	**Reliability of a Consecutive k-out-of-n: G System under the Effect of Different Shocks** Soad Mohamed Abdallah Bakry, N. A. Mokhlis, A. E. B. Abd Elghany
Statistics	Ehab M. Almetwally	**Advanced Copula-Based Models for Type II Censored Data: Applications in Industrial and Medical Settings** Ehab M. Almetwally
Pure Math.	Salsabeel Mohamed	**Relatedness in zero-determinant strategies** Salsabeel Mohamed, Shimaa Atef, Essam El-Seidy
Statistics	Mohamed ibrahem	**Quadratic Transmuted Modified Size-Biased Lehmann Type-II Distribution** M. Ibrahem, M. M. Nassar, S. S. Radwan, A. Elmasry
Statistics	A .Sadek	**Bayesian Estimation and Prediction for a Mixture Distribution Based on Type-II Hybrid censoring sample** A .Sadek, M. M. Mohie El-Din, A. Al-Dugin

Session	Computer Science and Pure Mathematics
Location	Dr. Bahaa El-Din Helmy Lab

chairpersons	Prof. Dr. Fayed F. M. Ghaleb Prof. Dr. Elsaid Mitouly Badr Prof. Dr. Mohammed Abdel-Megeed
Time	2:15 -- 3:45 PM

	Author Name	Title
Computer Science	Dr. Hussein Karam	**Future applications of immersive technologies in Metaverse-based Special educational needs in Conjunction with Egypt Vision 2030** Hussein Karam
Computer Science	Maged Magdy	**CC-IFIM: an efficient approach for incremental frequent itemset mining based on closed candidates** Maged Magdy, Fayed F. M. Ghaleb, Dawlat A. El A. Mohamed , Wael Zakaria
Computer Science	Muhamed Abdulhadi	**Deep Clustering-Based Anomaly Detection and Health Monitoring for Satellite Telemetry** Muhamed A. Obied, Fayed F. M. Ghaleb, Aboul Ella Hassanien, Ahmed M. H. Abdelfattah, Wael Zakaria
Computer Science	Nader Hussien	**Improved Segmentation Approach for Offline Arabic Handwritten Words by identifying Connections Between Characters** Nader Hussien, Wael Zakaria, Mohammad H. A. Abdel-Rahman, Fayed F. M. Ghaleb
Pure Math.	Asmaa Kh.Elsawy	**Kolmogorov Numbers for Relatively Bounded Operators** Nashat Faried, Asmaa Kh.Elsawy, Manar Maher
Pure Math.	Ahmed Abdelmoneim	**Some new generalized inequalities of Opia-type via (q,h)-Hahn difference operator** Ahmed Abdelmoneim El-Deeb