

CMAM'2021 Program

الملتقى الأول حول الرياضيات و تطبيقات الرياضيات
The First Conference on Mathematics and Applications of
Mathematics CMAM'2021 Jijel, June 30, July 01, 2021

GOOGLE MEET



THE FIRST CMAM'2021

LMAM LABORATORY

CMAM'2021 Program

Aims and Scopes

The First Conference on Mathematics and Applications of Mathematics (1st CMAM 2021) aims to allow academicians, researchers and Ph. D. students to discuss and present their recent research results in various areas of mathematics, especially those in relation with subjects developed by the Laboratory of Mathematics and Applications of Mathematics (LMAM) of Jijel.

The interest areas of the conference include, among others, the following topics:

- T1: Algebra and Topology,
- T2: Orthogonal polynomials and Number Theory
- T3: Difference equations,
- T4: Dynamical systems,
- T5: Combinatorics and Probability

The time in the program is with Algeria time: (Algeria time = GMT+1), for example 10.00 o'clock using Algeria time is 09.00 o'clock using GMT time.

CMAM'2021 Program

First Day : 30th June 2021

09h00 – 09h30 : Opening Ceremony , **Google meet link:** meet.google.com/ahq-wiaf-jjt

Time	Plenary Session: Room 1 - Chairman: Prof. N. Touafek , Google meet link: meet.google.com/ahq-wiaf-jjt
10h00 – 10h25	László NÉMETH, László SZALAY, Recursions in Motzkin triangle. Sopron University, Hungary.
10h30 – 10h55	Mohammad SAJID, Fractals and Chaos in Dynamical systems, Qassim University, Saudi Arabia.

Parallel Sessions 1 - Morning

Time	Link: meet.google.com/cei-wffj-sjd Session T1: Algebra and Topology. Room 1 – Chairman: Prof. A. Bouchair	Link: meet.google.com/wrq-wuyp-sud Session T2: Orthogonal polynomials and Number Theory. Room 2 - Chairman: Dr. A. Boussayoud
11h00 – 11h15	Mohammed ABDELMALEK, Some results for manifolds with density	Hind MERZOUK, Symmetric functions of binary products of Tribonacci and Tribonacci Lucas polynomials and chebyshev polynomials
11h15 – 11h30	Safia KORICHI, Some hard problems in lattices in \mathbb{R}^n .	Abrza LENSARI, Recurrence relation arising from confluent hypergeometric functions
11h30 – 11h45	Bilel SELIKH, ECC encryption scheme on the local ring $F_3[[\varepsilon]]$, $\varepsilon^3=0$	Chadia FAGHMOUS, 2-orthogonal polynomials and quadratic decomposition applications to the symmetric case
11h45 – 12h00	Karima CHATOUEH, Skew cyclic linear codes over $S_4 = \mathbb{Z}_4[v_1, v_2, v_3, v_4]/\langle v_i^2 = 1, v_i v_j - v_j v_i \rangle$	Walid KEHILA, On some congruences using multiple harmonic sums of length three and four
12h00 – 12h15	Aziza AIB, Optional control of infinite bilinear systems and its relation to Lie algebra	Walid WANNES, Means of some arithmetical functions on shifted smooth numbers
12h15 – 12h30	Mehsin JABEL ATTEYA, Hommo generalized *- Derivations of *-Rings	Nabiha SABA, A new generating functions of binary products of bivariate Fibonacci polynomials and some special numbers
Time	Link: meet.google.com/xna-szrs-oyu Session T3: Difference equations Room 3 – Chairman: Dr. I. Dekkar	
11h00 – 11h15	Youssef AKROUR, On the solutions of a system of max-type difference equations	
11h15 – 11h30	Nedjem Eddine RAMDANI, Collocation method for solving integro-differential equation	
11h30 – 11h45	Nadia MESBAH, Périodicité et stabilité pour certains équations dynamiques neutrales sur une échelle de temps	
11h45 – 12h00	Fatima SI BACHIR, Existence and Attractivity Results for ψ -Hilfer Hybrid Fractional Differential Equations	
12h00 – 12h15	Djemaia BENSİKADDOUR, Les surfaces minimales de translation dans l'espace de Lorentz-Heisenberg	
12h15 – 12h30	Merve KARA , Representation of solutions of eight systems of difference equations via generalized Padovan sequences.	

CMAM'2021 Program

12h30 – 14h00	Break
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Parallel Sessions 2 - After noon

Time	Link: meet.google.com/bva-ruay-zvd Session T: and Session T3: Difference equations Room 1 – Chairman: Dr. S. Rihan and Dr. F. Belhannache	Link: meet.google.com/zes-twct-mnq Session T4: Dynamical systems and Probability Room 2 - Chairman: Dr. S. Arroud and Dr. M. Gherda
14h00 – 14h15	Ali AHMED ABDULLAH, A note on generalized derivations with engel condition on lie ideals of prime rings	Othman YAKHLEF, Problem of interaction fluid-structure when the displacements of structure are limited by arigid obstacle
14h15 – 14h30	Nazim KHAN, A characterization of generalized Jordan *-derivations on prime PI-rings	Afef Amina RABIA, Periodic orbits of the fourth-order non-autonomous differential equations via averaging theory
14h30 – 14h45	Merab SVANADZE, Potential method in the theory of coupled theory of elasticity for triple porosity solids	Ouafaa BENHAMIDA, Positive solutions for non linear caputo-hadamard fractional differential equations with integarl boundary condition
14h45 – 15h00	Elif TAN, A Study on generalized quaternions via dual-generalized complex horadam number components.	Sana KARFES, On the maximum number of limit cycles of a planar differential system
15h00 – 15h15	Sarra TOUALBIA, Exponential Decay for the solution of a problem with Kelvin-Voigt term and Balakrishnan-Taylor Damping	Sabah BENADOUANE, A class of polynominal differential systems with explicit expression of first integral
15h15 – 15h30	Mariam MIKELASHVILI, Quasi-static problems in the coupled theory of double porosity elastic materials	Abir KICHA, Practical h -stability of solution of nonlinear differential equations with applications.
15h30 – 15h45	Amir hossein MOKHTARI, On proper maps	Mohamed BELAIDI, General markov processes in hilbert spaces
15h45 – 16h00	Dahmane BOUAFIA, Existence of solutions for a perturbed second-order problem on the half-line via Ekeland variational principle	Abdelouaheb BIBI, GMM estimation of continuous time bilinear processes
16h00 – 16h15	Kamel ALI KHELIL, Stability of Levin-Nohel difference equations with delay	Mebrouk GHERDA, Taux de hasard quadratique (QHRD) application sur la fiabilité des systèmes réparables
16h15 – 16h30	Nour el houda RETTAB, Estimation of asymptotic stability regions of non linear dynamical system	Karima KIMOUCHE, An estimators for the Wigner-Ville spectrum of random fields
Time	Link:meet.google.com/yoq-nmrb-mjd Session T5: Combinatorics and Probability and Session T Room 3 – Chairman: Dr. M. Ahmia and Prof. N. Touafek	
14h00 – 14h15	Hakim OUADJED, Confidence intervals of the distorted conditional tail expectation risk measure under dependence	
14h15 – 14h30	Abderrahmane BELGUERNA, The Asymptotic normality of conditional density function estimate when the data is quasi-associated and censored.	
14h30 – 14h45	Ibrahim BOUFELGHA, Global dominating broadcast in graphs	
14h45 – 15h00	Yousra GHAMIT , Overpartition analogues of	

CMAM'2021 Program

	q-binomial coefficients
15h00 – 15h15	Ali DJEBID , Techniques de détection et d'élimination de la symétrie dans la procédure de génération des cliques maximales
15h15 – 15h30	Mohamed ZAMIME , Edge removal on alliance of graphs
15h30 – 15h45	Nouressadat TOUAFEK , Investigation of the behavior of the solutions of some systems of difference equations
15h45 – 16h00	Mohamed HELAL , Global uniqueness results for fractional partial hyper bolic differential equations with finite state-dependent delay
16h00 – 16h15	Abdellatif BEN MAKHLOUF , Partial stability of fractional-ordersystems.
16h15 – 16h30	Ines BENRZIG , Stability of nonlinear parametric time delay systems: a homogeneous point of view

16h30 – 17h00	Break Coffee
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Parallel Sessions 3 – After noon		
Time	Link: meet.google.com/mqh-gzdq-fme Session T2: Orthogonal polynomials and Number Room 1 – Chairman: Dr. M.Chelgham	Link: meet.google.com/pyf-pvne-kbp Session T4: Dynamical systems Room 2 - Chairman: Dr. H. Benhassine
17h00 – 17h15	Ali BOUSSAYOUD , Bifurcations of symmetric function of the binary product of (p,q) -Fibonacci numbers with Mersenne numbers	Amin BENAÏSSA CHERIF , Oscillation pour une équation différentielle non linéaire du quatrième ordre sur les échelles de temps
17h15 – 17h30	Salah Eddine RIHANE , Repdigits as products of consecutive padovan or perrin numbers	Salima MECHROUK , Existence of positive unbounded solutions for Φ -laplacian BVPs on the half line.
17h30 – 17h45	Safia MEKHALFA , Necessary and sufficient conditions for the orthogonality of a new family of MOPS	Hani-el-yafi BENHASSINE , A parallel algorithm for galerkin least square stabilized stokes problem
17h45 – 18h00	Dalila TAKOUK , Comparison between compactly supported radial basis functions and spectral methods for solving two-dimensional Volterra integral equations	Tefaha LEJDEL ALI , Asymptotic Stability of Periodic Solutions of generalized nonlinear differential equations
18h00 – 18h15	Laid Elkhiri , Some super-congruences involving harmonic numbers and binomial coefficients	Ali KHALOUTA , An efficient computational method for solving a generalized fractional-order biological population model
18h15 – 18h30	Hamza MOUFEK , An Efficient Cryptosystem Based on Rank Metric Codes	Fatma SAÏD , Exponential stability on dynamique equations on time scales and applications
18h30 – 18h45	N.Rosa AIT-AMRANE , The negative subscripts of generalized Fibonacci numbers	Billal LEKDIM , Stabilization of a couple nonlinear axially moving beam

CMAM'2021 Program

18h45 – 19h00	Soufyane BOUGUEBRINE , On the construction of irreducible polynomials of degree $4n$ over finite fields of even characteristic using the polynomial composition.	Rebeiha ALLAOUA , Coexistence of first integral and algebraic limit cycles of a class of polynomial differential systems
19h00 – 19h15	Mourad CHELGHAM , Some identities and generating functions of Hadamard products of bivariate Mersenne polynomials	

Time	Link: meet.google.com/dwv-akqh-vbt Session T1: Algebra and Topology Room 3 – Chairman: Prof. A. Bouchair
17h00 – 17h15	Tarek ROUABHI , Characterization of groups satisfying a condition on 2-generators subgroups
17h15 – 17h30	Mansour BELARBI , Some properties of the heisenberg group
17h30 – 17h45	Sassia MAKHLOUF , An authenticated key agreement protocol using matrix conjugation
17h45 – 18h00	Manal AOUDJ , The full data calderon's problem in higher dimensions
18h00 – 18h15	Abdelkrim LATRECHE , Category of single valued neutrosophic sets
18h15 – 18h30	Leila BOUZID , The impact of wearing the mask on the evolution of the Covid-19 in Algeria
18h30 – 18h45	Hassane BOUREMEL , Some properties of an L -fuzzy lattice ordered group
18h45 – 19h00	Hammoud MENIGHER , Admissible topologie on $C(X, Y)$

CMAM'2021 Program

Second Day : 1st July 2021

Time	Plenary Session: Room 1 - Chairman Prof. N. Touafek, Google meet link: meet.google.com/hcb-bpcu-ikg
09h00 – 09h25	Sofiane BOUARROUDJ , On lie superalgebras in characteristic 2. New York University Abu Dhabi, United Arab Emirates.
09h30 – 09h55	Lemnaouar NOUI , Outils algébriques et technologie de l'information. Batna 2 University, Algeria.

Parallel Sessions 4 - Morning		
Time	Link: meet.google.com/rtd-bhpr-uta Session T3: Difference equations Room 1 – Chairman: Dr. Y. Halim	Link: meet.google.com/enk-ffvz-jsc Session T2: Orthogonal polynomials and Number Theory. Room 2 - Chairman: Dr. A. Boussayoud
10h00 – 10h15	Khalil AYADI , Diophantine approximation of some pisot and salemseries over a finitefield	Fouad BOUNEBIRAT , Congruences on the hyper-sums of powers of integers
10h15 – 10h30	Yacine HALIM , Stability of Solution of a recursive sequences system	Souhila BOUGHABA , Generating functions and symmetric functions
10h30 – 10h45	Amel BOULFOUL , On the maximum number of limit cycles of generalized polynomial liénard differential systems via averaging theory	Salim BADIDJA , Representation of integers by k-generalized Fibonacci sequences and applications in cryptography
10h45 – 11h00	Sihem OUDINA , Existence and local stability of positive fixed points for the quadratics rational difference equation	Mohamed KECIES , Un analogue de la méthode de la sécante pour résoudre un problème de recherche de zéro d'une équation dans le cadre p-adique.
11h00 – 11h15	Salih BOUTERNIKH , On the growth of meromorphic solution of ultra metric difference equations	Karima ALI KHELIL , Darboux transformations and orthogonal polynomials: application to the discrete classical case
11h15 – 11h30	Mohamed Amine KERKER , On the global dynamics of a rational difference equation with variable coefficients	Khadidja BOUBELLOUTA , Some applications of elementary symmetric functions
11h30 – 11h45	Houari FETTOUCHE , Linear differential equations with growth of local solutions	Abdeldjabar HAMDJ , Some identities of generalized Tribonacci and Jacobsthal polynomials
11h45 – 12h00	Farida BELHANNACHE , On the stability of a higher-order difference equation	Ahmed NASRI , Generation and decomposition of 2- orthogonal polynomials
12h00 – 12h15	Elmansouri AOUATEF , A couple periodic KdV system in Gevery-Bourgain spaces	Fatma YAKOUBI , Generating functions of products k-Balancing numbers
12h15 – 12h 30	Salah BENHIOUNA , The existence of a periodic solution for second order non linear delay differential equations	Diffalah LAISSAOUI , Some results on degenerate Bell polynomials
12h30 – 12h 45	Sara Imane ZEMOUL , Propriétés asymptotique de $\hat{\rho}$ dans le cas associé	Hassina ZERROUG , The ordinary generating functions of binary products of Tetranacci numbers with some numbers and polynomials

CMAM'2021 Program

Time	Link: meet.google.com/nyb-ahmc-vqp Session T4: Dynamical systems Room 3 – Chairman: Dr. Y. AKROUR
10h00 – 10h15	Rabah KHEMIS , On positive periodic solutions of a population model with an iterative harvesting term
10h15 – 10h30	Ahleme BOUAKKAZ , Some existence results for a delay hematopoiesis model with harvesting
10h30 – 10h45	Maghnia HAMOU-MAAMAR , The impact of mathematical modeling on the understanding of COVID-19 transmission
10h45 – 11h00	Rabiah OUHABI , Controlling chaos of hyperchaotic system using Back stepping and Adaptive control algorithms
11h00 – 11h15	Loubna DAMENE , Periodic solution of a class of differential systems
11h15 – 11h30	Rebiha BENTERKI , Zero-Hopf bifurcation of Malaria model.
11h30 – 11h45	Ilham GACEM , Global stability of an SEIS epidemic model with nonlinear incidence function
11h45 – 12h00	Mohamed Lamine SAHARI , Dynamic of 2D spatiotemporal discrete systems
12h00 – 12h15	Rima CHOUDER , On the non-existence of limit cycles in a class of cubic kolmogorov systems
12h15 – 12h30	Oussama BOUANANI , A fast functional locally modelled of the cumulative distribution function: Functional data.
12h30 – 12h45	Saad-Eddine HAMIZI , A family of planar differential systems with explicit expression for algebraic and non algebraic limit cycles
12h45 – 13h00	Zakaria BOUMEZBEUR , Useful Technique for Analyzing the Solutions of Neutral Stochastic Differential Equations driven by G-Brownian motion

13h00 – 14h00	Break
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CMAM'2021 Program

Parallel Sessions 5 - After noon		
Time	Link: meet.google.com/uno-jpoo-vsv Session T and Algebra- Topology Room 1 – Chairman: Dr. F.Belhannache and Dr. M. Chelgham	Link: meet.google.com/tvv-fvfo-zof Session T4: Dynamical systems and Probability Room 2 - Chairman: Dr. H. Benhassine and Dr. M. Gherda
14h00 – 14h15	Nesrine AZIZI, The critically duo-free infinite tournaments	Houdaifa MELKI , Limit cycles of polunomial differential system in dimension 2 via averaging theory
14h15 – 14h30	Houria MEGHNAFI, Controllability of impulsive stochastic fractional integro-differential equations with infinite delay	Ahlem ROUBACHE, On the zero-hopf bifurcation of the generalized michelson system
14h30 – 14h45	Imane SOUKTANI, On the specta of doubly regular tournaments	Chems Eddine ARROUD, Stability and bifurcation analysis of biomathematics system using center manifold theorem
14h45 – 15h00	Mustapha BOUALLALA, A dynamic contact problem with friction in Thermo-Viscoelasticity	Rachid BOUKOUCHA, Algebraic and non-algebraic limit cycles of differential systems
15h00 – 15h15	Merve KARA, On A Solvable System of Non-linear Difference Equations with Variable	Ahlem BELFAR, Qualitative dynamics of a quadratic polynomial differential systems exhibiting a classical cubic algebraic curve
15h15 – 15h30	AmiraAchouak OULHA, On approximate solutions for robust semi-infinite multi-objective symmetric cone optimization	Nourelhouda BERGUELLAH, Crypto graphic study of a functional message using a chaotic model.
15h30 – 15h45	Abderrahmane BOUCHAIR, Necessary and sufficient condition for admissibile set open topologies on function spaces	Amel ROULA, Exponential probability distribution on symmetric matrices
15h45 – 16h00	Soheyb MILLES, More on intuitionistic fuzzy topology generated by intuitionistic fuzzy relation	Leila BOUTARFA, M/M/1 Retrial Queue with Service Interruptions
16h00 – 16h15	Sarra BOUDAOU, Principal ideals and filters on a trellis	Chaima HEBCHI, Missinga trandom : regression function and conditional hazard for functional data.
16h15 – 16h30	.Sarra TALBI, Linear complementary dual codes over finite frobenius rings	Wahiba BEYAHIA, Parametric estimation of the density of delay in a process of diffusion
Time	Link: meet.google.com/hcq-bvwf-tqc SessionT5: Combinatorics and Difference equations Room 3 – Chairman: Dr. M. Ahmia and Prof. N. Touafek	
14h00 – 14h15	Hayat LOUHAB, Robust equivariant nonparametric regression estimators for functional ergodic data	
14h15 – 14h30	Hamza DAOUDI, Asymptotic normality of a conditional risk function estimate in the single index in high-dimensional statistics	
14h30 – 14h45	Soumia IDRISSE, Mixed stochastic functional differential equations	

CMAM'2021 Program

14h45 – 15h00	Ahlem GHOUAR , A Generalization of Gamma Lindley Distribution
15h00 – 15h15	Aris SADI , Parametres de graphes : combinatoire et algorithmes
15h15 – 15h30	Madjid SEBAOUI , On a new generalized Fubini polynomials
15h30 – 15h45	Ibtissam TALHA , Periodicity of the solutions of system of rational difference equations associated to Fibonacci numbers
15h45 – 16h00	Adel LACHOURI , Existence and uniqueness results for non linear implicit fractional q-difference equation via fixed point theorems
16h00 – 16h15	Mohammed Asseddik SLIMANI , Existence and boundedness of solutions for systems of difference equations infinite delay
16h15 – 16h30	Lama Sh. ALJOUFI , Dynamical behavior and expressions of solutions of a class of higher-order nonlinear difference equations

16h30 – 17h00	Break Coffee
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Parallel Sessions 6 – After noon		
Time	Link: meet.google.com/rri-jtuu-mcu Session T5: Combinatorics and Number Theory Room 1 – Chairman: Dr. M. Ahmia	Link: meet.google.com/xgc-aahj-mka Session T4: Dynamical systems Room 2 - Chairman: Dr. Y. Halim
17h00 – 17h15	Kahina IMEÇAOUDENE , Two-way communication retrial queus with constant policy services interruptions and two types of incoming calls	Douaa HAMRI , Analysis and synchronization of chen chaotic systems
17h15 – 17h30	El-hacene CHALABI , On the stochastic differential equation driven by g-brownian motion with infinite delay	Amira KHELIFA , Representation of solution of a system of difference equation in terms of Fibonacci numbers
17h30 – 17h45	Abdelghafour BAZENIAR , A new generalization of stirling numbers of the first kind	Asma ALLAM , On the behavior of the solutions of a system of nonlinear difference equations
17h45 – 18h00	Moussa AHMIA , The generalized r -stirling numbers of the first kind	Asma BOUZZIZ , On the global behavior of a higher-order non autonomous difference equation
18h00 – 18h15	Rafik BELHADEF , Some congruences of the P-ADIC factorial	Safa CHOUAF , Solutions of an iterative one-dimensional steady diffusion equation
18h15 – 18h30	Mihoub BOUDERBALA , On a suminvolving the number of distinct prime factor function related to the integer part function	Benaoumeur BAYOUR , General quantum differenceoperator on time scales
18h30 – 18h45	Brahim MITTOU , On new arithmetic function	Mecene RAHMOUNA , On the linear of dirichlet components
18h45 – 19h00	Khaoula ROUBAH , Résolution des équations intégrales nonlinéaires de Volterra utilisant polynomes de Lagrange Singular	Jihane ABDELLI , Extreme values estimation of distortion risk premiums in reinsurance under censoring

CMAM'2021 Program

Time	Link: meet.google.com/fsv-jheh-zgt Session T1: Algebra and Topology. Room 3 – Chairman: Prof. A. Bouchair
17h00 – 17h15	Hichem EL HENDI, Notes on the group $SL(2,R)$
17h15 – 17h30	Aissa NASLI BAKIR, properties of a type operators
17h30 – 17h45	Zoheir CHEBEL, The structures of weak bi algebras and the structures weak hopf algebras
17h45 – 18h00	Nadhir BENDRICI, Tracing the intersection curve between two parametric surfaces
18h00 – 18h15	Bariza KAHLOUL, The lindley generalized pareto distribution with its properties and estimation
18h15 – 18h30	Abdallah ROUBI, Existence of a weak solution to a markovian BSDE with discontinuous
18h30 – 18h45	Ilias LAIB, The erdos conjecture and primitive sequences of degree at most 5
18h45 – 19h00	FatmaZohra SEGHIER, On size-biased Poisson XLindley distribution: properties and application

Thank you for your participation