



Laboratory of  
Research in Analytical and Operational  
Methodological Applications in Economics  
Oran Graduate school of Economics  
&  
Laboratory of  
Industry, Organizational Development of  
Institutions, and Innovation Khemis Meliana  
University

**Organize**

Under the high patronage of the Director of the  
Graduate School of Economics of Oran

**THE NATIONAL CONFERENCE:  
Mathematical Methods in Economics  
Analysis  
Oran 1st \ 2nd June 2024**



**FOR MORE INFORMATION  
PLEASE CONTACT**

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# Saturday 01/06/2024

Morning period

## Opening ceremony

Chairman: Prof. El Moubarek Mohamed

9:30	<b>Prof. Yousfate Abderrahmane, University of Sidi-Bel-Abbes</b> Les processus de Markov dans les processus décisionnels en économie
10:00	<b>Prof. Benbouziane Mohamed, Abou Bakr Belkaid University of Tlemcen</b> The Marriage of Math and Economics: A Symbiotic Dance with Nuance
11:00	<b>Coffee Break</b>

Chairman: Dr Bekkara Samir

11:30	<b>Prof. Bebbouchi Rachid, University of Science and Technology Houari Boumediene (USTHB)</b> Une histoire de l'Intelligence Artificielle et ses conséquences en Economie
12:00	<b>Prof. Ziad M'hamed</b> La modélisation en équilibre général calculable : Un réexamen
13:00	<b>Break</b>

# Saturday 01/06/2024

Afternoon period

## ROOM 1

Moderated by Dr Abderrahim Belaidi & Dr El Habib Mekkaoui

14:00	<b>Dr Takhedmit Baya, Fatah Cheurfa &amp; Karim Abbas</b> Numerical analysis of European call option
14:20	<b>Dr Belbargat Zoulikha</b> "On the Conjecture of Ayad and Kihel": Une plongée approfondie dans la théorie des nombres
14:40	<b>Dr Bada Abdelhak &amp; Djouamaa Amine</b> L'importance des mathématiques économiques dans le processus de prise de décision
15:00	<b>Dr Benghalem Abdelhadi &amp; Ahlem Touil</b> Econometric model selection framework for time series analysis: A case study using CO2 emissions and agricultural-livestock production data from Algeria
16:00	<b>Closing</b>

## ROOM 2

Moderated by Dr Linda Fatima Oudjedi Damerdji & Dr Mohammed Meziane

14:00	<b>Dr Moulai-Khatir Anes</b> Economic Dynamics of Fisheries: A Mathematical Variable Price Model
14:20	<b>Abderrahim Sidi Mohammed</b> Controlling pest insect dynamics: harnessing parasitoids as effective agents
14:40	<b>Dr Medjahed Djilali &amp; Dr Abdelkader Benali</b> New Exact Solutions of a Nonlinear Black-Scholes Equation in Mathematical Finance
15:00	<b>Abdellaoui Fatima &amp; Rahmane Mebrouk</b> Boundedness and Stability of Solutions to Third Order Nonlinear Integro-Differential Equations of Neutral Type With Retarded Argument
16:00	<b>Closing</b>

# Saturday 01/06/2024

Afternoon period

## ROOM 3

Moderated by Dr Ikram Khelil & Dr Mohamed Saidi

14:00	<b>Elias Taki Eddine Mohammed Chikouche &amp; Fatima Benziadi</b> Existence and uniqueness of the solutions to natural equations under non-Lipschitz conditions
14:20	<b>Dr Mammam Bounouar</b> Econometrics of shadow economy, the predictability of Algerian informal exchange rate
14:40	<b>Dr Bouredji Hind &amp; Sayah Abdallah</b> Bias correction of kernel density estimator
15:00	<b>Khelifa Berkane</b> SIRDS epidemic modeling enhanced by fractional brownian motion
15:20	<b>Dr Chellali Cherifa &amp; Dr Daoud Fatiha</b> Mathematical foundation in economic modeling : the role of invertible matrices in input-output analysis

16:00 **Closing**

## ROOM 4

Moderated by Dr Latifa Mokhtari & Dr Cherifa Chellali

14:00	<b>Dr Soulimane Nesrine</b> Impact de la pandémie du COVID-19 sur l'économie algérienne – Analyse statistique
14:20	<b>Dadouche Khadidja</b> Transcendence of e
14:40	<b>Mouchir Samiha &amp; Abdeldjalil Slama</b> Numerical methods for generalized stochastic Volterra integro-differential equations
15:00	<b>Dr Djerroud Lamia</b> L'influence du choix du noyau discret dans l'estimation non paramétrique de la fonction de régression
15:20	<b>Dalla Zineb &amp; Khalladi Mohammed Taha</b> Square mean $(w,c)$ -periodic limit type stochastic process and square mean asymptotically $(w,c)$ -periodic type stochastic process

16:00 **Closing**

# Sunday 02/06/2024

Morning period

## ROOM 1

Moderated by Dr Abdelhadi Benghalem & Dr Abdelhak Bada

9:00	<b>Dr Laib Ilias</b> Translated sums on quasi-primitive sequences
9:20	<b>Dr Kebaili Siham</b> Refined descriptive sampling algorithm for dependent variables using Iman and Conover method in Monte Carlo simulation
9:40	<b>Dr Younsi Leila</b> Optimisation d'une fonction fractionnaire sur le front de Pareto
10:00	<b>Dr Bennihi Aymen Salah &amp; Dr Kaci Nadjet</b> Deep learning models versus traditional time series methods a comparative study for crude oil price prediction
10:20	<b>Break &amp; Poster session</b>
10:50	<b>Zouai Chabha</b> L'utilisation de l'économétrie dans le secteur énergétique
11:10	<b>Dr Belaidi Abderrahim &amp; Bensirat Dounia Amira</b> Statistical Study and Econometric Modeling of Factors Influencing Healthcare Seeking
11:20	<b>Dr Mekkaoui El Habib, Dr Rennane Rabeh &amp; Dr Belaidi Abderrahim</b> Critères d'évaluation pour l'analyse macroéconomique en Algérie
11:45	<b>Closing ceremony</b>

## ROOM 2

Moderated by Dr Mostepha Naceri & Dr Mohamed Merras

9:00	<b>Dr Segueni Fouzia</b> Contrôlabilité à zéro pour les problèmes de diffusion à données incomplètes
9:20	<b>Nichani Rabia &amp; Gasmi Laid</b> Time Series Forecasting using LSTM and XGBoost
9:40	<b>Bellabes Zineb &amp; Naima Boussekine</b> Analysis of existence and uniqueness in a Delayed variable-order fractional differential equation
10:00	<b>Belqassim Azzouz &amp; Moustafa Beddani</b> Study of a coupled system of fractional differential equations
10:20	<b>Break &amp; Poster session</b>
10:50	<b>Berrailes Ali &amp; Abdallah Beddani</b> Variational problem with two maximal monotone operators
11:10	<b>Dr Barache Bahia &amp; Samir Arezki</b> Mann's iteration scheme with random errors for solving Volterra Integral equation
11:45	<b>Closing ceremony (in ROOM 1)</b>

# Sunday 02/06/2024

Morning period

## ROOM 2

Moderated by Dr Amina Alloun & Dr Amal Argillos

9:00	<b>Bendhina Meriem &amp; Fillali Youcef</b> (دراسة حالة) نماذج التنبؤ الرياضي بالمخاطر في البنوك التجارية الجزائرية
9:20	<b>Dr Kamel Tahri &amp; Khadra Tahri</b> Existence and uniqueness solution for Biharmonic-Kirchhoff Equation
9:40	<b>Djelouat Ouardia &amp; Pr Lahlou Chérif</b> Le secteur pharmaceutique algérien entre développement industriel et gestion des pénuries des produits pharmaceutiques
10:20	<b>Break &amp; Poster session</b>
10:50	<b>Dr Oudjedi Damerdji Linda Fatima</b> Etude de la stabilité asymptotique du modèle de cycle économique de Kaldor Kalecki
11:10	<b>Dr Khelil Ikram</b> Optimisation économique et gestionnaire : Théorie, méthodes et applications
11:45	<b>Closing ceremony (in ROOM 1)</b>

## ROOM 4

Moderated by Dr Fatima Zohra Benaceur & Dr Rennane Rabeh

9:00	<b>Boukarabila Siham</b> Non local elliptic problem with superlinear dependence on the gradient
9:20	<b>Dr Meziane Mohammed</b> Mathématiques et industrie
9:40	<b>Hettadj Djamel-Eddine &amp; Habib Djourdem</b> Existence and uniqueness for fractional differential equations with multipoint and multi-term integral boundary conditions
10:00	<b>Dr Nehari Mohamed &amp; Mustapha Yebdri</b> Existence of a periodic solution for a state-dependent Delay differential equation with a singular perturbation
10:20	<b>Break &amp; Poster session</b>
10:50	<b>Fatima Zohra Bengrine</b> Elliptic Lane-Emden systems with inverse square potential
11:10	<b>Dr Abeidallah Mohammed</b> Estimate Hazard function : functional data case
11:20	<b>Mouli Kawther</b> Revisiting the Erdős conjecture: a correction to Lichtman's proof
11:45	<b>Closing ceremony (in ROOM 1)</b>

# Sunday 02/06/2024

*Morning period*

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## Poster session

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### **Naas Youcef**

Recursive methods for solving linear systems

### **Benaouda Oum elkheir**

For censored dependent data and functional regressors, strong uniform consistency of a non parametric estimator of a conditional quantile

### **Dr Bekai Djilali**

$(n, m)$  Power- $(D, A)$ -Hyponormal Operators in Semi-Hilbertian Space

### **Omar Alimerina**

Nonexistence of global weak solutions of damped wave equation with nonlinear memory

### **Bouزيد Houari & Dr Benali Abdelkader**

Analysis of Solutions to  $q$ -Fractional Differential Systems with Caputo Derivative and Nonlinearities

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**Honorary President:** Prof. Semaoune Khalissa (Director of Oran Graduate School of Economics)

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**Conference Chair:** Dr Chellali Cherifa (GSE Oran)

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**Coordinator:** Dr Khelil Ikram (GSE Oran)

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