International Congress on
Statistics, Stochastic, Modeling, and Data Science (SSMDS'26)
Faculty of Sciences, Department of Mathematics, Amphitheater (G)
July 02-03, 2026, Oujda Morocco

Scientific Program

Thursday, July 02

Time	Activity
08:00–09:00	Reception and Registration (G)
09:00–09:30	Opening Ceremony (G)
09:30–10:15	Plenary Session 1: Prof. Youssef OUKNINE, Morocco (G) Un survol de la théorie générale des processus : des filtrations aux théorèmes fondamentaux.
10:15–10:45	Coffee Break
10:45–11:30	Plenary Session 2: Prof. Sophie DABO-NIANG, France (G) Forecasting mortality rates with functional signatures.
11:30–13:15	Session I (G)
13:15–14:45	Lunch
15:00–15:45	Plenary Session 3: Prof. Bouchra NASRI, Canada (G) On copula-based regression models: from classical regression approaches to mixed models using factor copulas.
15:45–17:15	Session II (G)
17:15–17:45	Coffee Break
17:45–19:45	Session III (G)

Friday, July 03

Time	Activity
09:00–09:45	Plenary Session 4: Prof. Bruno RÉMILLARD, Canada (G) Conditional independence tests between arbitrary time series.
09:45–10:30	Plenary Session 5: Prof. Khalid HATTAF, Morocco (G) A new class of fractional differential equations applied to modeling in epidemiology and social sciences.
10:30–11:00	Coffee Break
11:00–13:00	Session IV (G)
13:15–15:00	Lunch
15:15–16:00	Plenary Session 6: Prof. Mohamed MELLOUK, France LDP and density estimates for perturbed diffusions.
16:00–17:30	Session V (G)
17:30–18:00	Coffee Break
18:00–19:45	Session VI (G)
19:45	Closing of the Congress

Thursday, July 02

Time	Scientific Program	
8h00-9h00	**Reception and Registration**	
9h00-9h30	**Opening Ceremony**	
9h30-10h15	**PL1 : Pr. Youssef OUKNINE — AMPHI G — Chair : Pr. Mohamed AIT OUAHRA** **Un survol de la théorie générale des processus : des filtrations aux théorèmes fondamentaux**	
10h15-10h45	**Coffee break**	
10h45-11h30	**PL2 : Pr. Sophie DABO-NIANG — AMPHI G — Chair : Pr. Noureddine RHOMARI** **Forecasting mortality rates with functional signatures**	
Session I	**AMPHI G**	**Chair : Pr. Moustapha FAIZI**
11h30-11h45	I-1	**Taoufik BOUEZMARNI :** Testing Granger Non-Causality in Extremiles: Copula and Integrated Quantile Regression Approaches
11h45-12h00	I-2	**Farid EL KTAIBI :** Bivariate Extensions of the Skellam Distribution with a Full Spectrum of Dependence
12h00-12h15	I-3	**Rida BENHADDOU :** Minimax Estimation and Inference for Varying Coefficient Model via Generalized Laguerre Series
12h15-12h30	I-4	**Yousri SLAOUI :** Recursive Unsupervised Classification Based on Nonparametric Functional Mode Estimation
12h30-12h45	I-5	**Mohamed NACHAT :** Statistical and neural approaches to change-point detection: a comparative study
12h45-13h00	I-6	**Solym MANOU-ABI :** Quantiles and Superquantile Parameter Estimation of Stable and GPD Distributions
13h00-13h15	I-7	**Soumia ELFAMA :** A priori actuarial pricing of a real motor insurance portfolio
13h15-14h45	**Lunch**	
15h00-15h45	**PL3 : Pr. Bouchra NASRI — AMPHI G — Chair : Pr. Said EL MELHAOUI** **On copula-based regression models: from classical regression approaches to mixed models using factor copulas**	
Session II	**AMPHI G**	**Chair : Pr. Aissa SGHIR**
15h45-16h00	II-1	**José Luís DA SILVA :** Identification of the residual term in multiplicative self-decomposition using Fox H-functions
16h00-16h15	II-2	**José Luís DA SILVA :** Identification of the residual term in multiplicative self-decomposition using Fox H-functions
16h15-16h30	II-3	**Noura CHAABAN :** On a general characterization of Non-negative local martingales with continuous running supremum via their maximun times
16h30-16h45	II-4	**Manal JAKANI :** Reflected SDEs in non-smooth time-dependent domains
16h45-17h00	II-5	**Farid OULGHAZI :** Central limit theorems for weighted power variations of a class of non-stationary Gaussian processes
17h00-17h15	II-6	**Youssef LAMRABAT :** Conditional expectation for Pettis-integrable random sets

17h15-17h45	**Coffee break**	
Session III	**AMPHI G**	**Chair : Pr. Nabil AZOUAGH**
17h45-18h00	III-1	**Stefana TABERA TSILEFA :** Deep learning for Stable-Driven Stochastic Differential Equations with Fractional physics-informed neural networks
18h00-18h15	III-2	**Ismaila BALDÉ :** Graphical lasso networks in the context of causal mediation analysis (mglasso)
18h15-18h30	III-3	**Aicha SLEYMANE :** A comparative study of dimensionality reduction methods
18h30-18h45	III-4	**Mohammed ALAHIANE :** Deep Functional Neural Networks for Function-on-Function Regression
18h45-19h00	III-5	**Khalid BELABBES :** Statistical Risk Measures Under Uncertainty Theory: Applications to Financial Portfolio Optimization
19h00-19h15	III-6	**Mariam AARRAS :** Three-Parameter Lognormal Diffusion Process: A Novel Numerical Approach for Statistical Inference and Predictive Analysis
19h15-19h30	III-7	**Lamiaa FARES :** Time Series Forecasting of Electricity and Water Demand: A Multi-Model Benchmarking Study
19h30-19h45	III-8	**Mohamed LATIFI :** Assessing Stochastic Thinking: A Multidimensional Framework

Friday July 03

Time	Scientific Program
09h00-09h45	**PL4 : Pr. Bruno RÉMILLARD** **AMPHI G** **Chair : Pr. Allal JELLOUL** **Conditional independence tests between arbitrary time series**
09h45-10h30	**PL5 : Pr. Khalid HATTAF** **AMPHI G** **Chair : Pr. Abdesslam BOUTAYEB** **A new class of fractional differential equations applied to modeling in epidemiology and social sciences**
10h30-11h00	**Coffee break**

Session IV	**AMPHI G**	**Chair : Pr. Bouchra EL BOUJDAINI**
11h00-11h15	IV-1	**Abdesslam BOUTAYEB :** A compartmental model for Sarcopenia
11h15-11h30	IV-2	**Z.S BOXONOV :** Discerete-time dynamical behaviour of a diabetic population
11h30-11h45	IV-3	**Mohamdi MAOULAININE :** Stability Analysis of a Multi-Delay Viral Immune Response Model
11h45-12h00	IV-4	**Abdellah AZDOUD :** Global Stability Analysis of an HIV-1 and HIV-2 Model with Drug Resistance Compartments
12h00-12h15	IV-5	**Nabyl BAJJA :** Impact of environmental switching and Lévy noise on tumor-immune interaction: Extinction and persistence thresholds
12h15-12h30	IV-6	**Hanae OUAHHABI :** Time-Varying Roughness in Financial Markets: A Multifractional Stable Process Framework

12h30-12h45	IV-7	**Hala KHARKHOUR :** Inverse Lamperti Transform of Fractional Brownian Motion: Statistical Identification and Applications in Medical Imaging
12h45-13h00	IV-8	**Issa-Mbeanard DABO :** Study of a high-dimensional neural network model on heterogeneous data using random matrix theory
13h00-15h00	**Lunch**	
15h15-16h00	**PL6 : Pr. Mohamed MELLOUK** **AMPHI G** **Chair : Pr. Abderrahim ASSLIMANI** **LDP and density estimates for perturbed diffusions**	
Session V	**AMPHI G**	**Chair : Pr. Soufiane MOSSATEN**
16h00-16h15	V-1	**Abdelhak ESEGHIR :** Économie circulaire et emploi en Europe: une analyse empirique par le modèle autorégressif à retards échelonnés (ARDL)
16h15-16h30	V-2	**Majda EL ALLALI :** Consistent Parameter Estimation for the Stochastic θ-Milstein Discretization via the Generalized Method of Moments and the $\theta \geq 3/2$ Stability Threshold
16h30-16h45	V-3	**Youssef MAHRAZ :** Strong and weak convergence of 3/2 nonlinear mean reverting model based on Milstein-type discretizations
16h45-17h00	V-4	**Iman KERTIT :** Modélisation stochastique des séries temporelles : ARFIMA et processus d'Ornstein-Uhlenbeck fractionnaire amélioré (ifOU)
17h00-17h15	V-5	**Mohamed HARIMECH :** L'algorithme SAEM pour estimation des paramètres d'un modèle SIR stochastique
17h15-17h30	V-6	**Hiba ARIF :** Robustness Evaluation of Data-Driven and Model-Based Control under Stochastic Sensor and Actuator Perturbations
17h30-18h00	**Coffee break**	
Session VI	**AMPHI G**	**Chair : Pr. Hassan OUKHOUYA**
18h00-18h15	VI-1	**Brahim BOUBAKER** : Author Identification in Articles Using Retrieval-Augmented Generation: A Comparative Analysis of OpenAI and Hugging Face Embedding Scores
18h15-18h30	VI-2	**Driss KOURYANI :** Explicit Contextual Shrinkage in Stochastic Frontier Analysis: Measuring School Efficiency in Morocco Using PISA Data and Simulation
18h30-18h45	VI-3	**Bouchra DAOUDI :** Handling Linguistic Ambiguity in Arabic Morphosyntactic Tagging with Fuzzy Conditional Random Fields
18h45-19h00	VI-4	**Hajar ERRAHMANI :** Artificial Intelligence-Enhanced Forecasting of Financial Returns Using Econometric, Machine Learning, and Deep Learning Models: Evidence from Cryptocurrency and Foreign Exchange Markets
19h00-19h15	VI-5	**Mohammed KHELLOUF :** $L2$-Consistent and Asymptotically Normal Quasi-Maximum Likelihood Estimators for Milstein-Discretized Scalar Diffusion Process
19h15-19h30	VI-6	**Sara HDDA :** Determinants and Forecast of Out-of-Pocket Health Expenditure in Morocco: A LASSO-ARDL Approach (2000–2022)
19h30-19h45	VI-7	**Nafia AGHOUTANE :** Stationary distribution, extinction, and persistence of a stochastic tumor-immune interaction model with multiplicative noise