

Algerian Democratic and Popular Republic Ministry of Higher Education and Scientific Research University of Saida Dr Tahar Moulay





## Program Schedule for the 1st International Workshop of Statistics and its Applications (WSA'23), Saïda, March 01<sup>st</sup>-02<sup>nd</sup>, 2023

| Wednesday, 01 March 2023 |   |  |  |
|--------------------------|---|--|--|
| 08:00-10:00              | Registration & Opening Speeches   |  |  |
| Plenary Session          |   |  |  |
| 10:00-11:00              | Talk 1: Regression estimation for continuous time functional data processes with missing at random response<br>Prof. Mohamed CHAOUCH<br>University of Qatar, Qatar<br>Chair : Prof. Salim BOUZEBDA<br>University   GI - Génie Informatique   LMAC –France |  |  |
| 11:00-11:30              | Coffee Break  |  |  |
| 11:30-12:30              | Talk 2 : On multivalued markovian functions of Markov chains<br>Prof. Abderahmane YOUSFATE<br>Djillali Liabes University of Sidi Bel-Abbès, Algeria<br>Chair : Prof. Karima BELAIDE<br>University A.Mira of Béjaia, Algeria                               |  |  |
| 12:30-14:00              | Lunch Break   |  |  |

| Parallel sessions |   |  |
|-------------------|---|--|
| 14:30-16:00       | Room 1: Workshops<br>Chair : Prof. Fethi MADANI<br>Dr Moulay Tahar University of Saida, Algeria   | Room 2: Workshops<br>Chair : Prof. K. Mohammed ATTOUCH<br>Djillali Liabes University of Sidi Bel-Abbès , Algeria                     |
|                   | Nassima BAYARASSOU<br>Strong uniform consistency rate of a relative regression<br>function estimator for left truncated and right censored<br>data under a-mixing condition | Souad BOUKHIAR<br>Estimation in functional autoregressive models with random<br>coefficients   |
|                   | Hadjila TABTI<br>Estimation and simulation of the conditional cumulative<br>distribution function   | Khedidja DJABALLAH-DJEDDOUR<br>Crude oil import and product forecasting based on long memory-<br>ARFIMA model.                       |
|                   | <b>Abdelkader BOUADJEMI</b><br>Asymptotic normality of a kernel estimator of<br>conditional cumulative distribution function via a the<br>functional single index structure | <b>Mohammed BASSOUDI</b><br>Vector error correction model (vecm) estimate in long-term<br>relationship studies with application      |
|                   | Hadjer KEBIR<br>The almost sure convergence of the recursive kernel<br>estimate of the conditional hazard function form<br>censored functional erogdic data                 | <b>Djillali SEBA</b><br>A hybrid model for forecasting Carbon Dioxide emissions in Algeria   |
|                   | <b>Abbassia BENCHIHA</b><br>Asymptotic properties of regression operator in local<br>linear estimation with missing at random data  | Khadidja ABDELHAK<br>Local linear estimation of the conditional hazard function for index<br>model in case of missing data at random |
| 16:00-16:30       | Coffee Break +  | poster session (page 6/6)  |

| Parallel sessions |   |  |  |
|-------------------|---|--|--|
|                   | Room 1: Workshops<br>Chair: Prof. Mohamed CHAOUCH<br>University of Qatar, Qatar   | Room 2:Workshops<br>Chair :Prof. Amina Angelika BOUCHENTOUF<br>Djillali Liabes University of Sidi Bel-Abbès, Algeria   |  |
| 16:30-18:00       | Amina NACERI<br>Exact quadratic error of the local linear regression<br>operator estimator for functional covariates          | Kouider DJERFI<br>Shrinkage estimation for some fractional Brownian motion<br>models   |  |
|                   | <b>Mohamed CHERFI</b><br>On the nonparametric estimation of conditional Kendall's<br>tau with functional covariate.           | Abdelmalik KEDDI<br>Asymptotic analysis of a kernel estimator for parabolic stochastic<br>partial differential equations driven by sub-fractional Brownian<br>motion |  |
|                   | Mustapha MOHAMMEDI<br>The k-nearest neighbors method in single index<br>regression model                                      | Malika KORSO FECIANE<br>On parameter estimation for stochastic differential equations<br>with small noise  |  |
|                   | Youcef SOUDDI<br>On the nonparametric estimation of the conditional<br>empirical process with functional ergodic data         | Chafiâa AYHAR<br>Nonparametric estimation of the mean hitting times for semi-<br>Markov processes  |  |
|                   | Soumia AYAD<br>Local linear modelling of the conditional<br>cumulative distribution function: functional<br>ergodic data case | Tayeb HAMLETNonparametric estimation of the stationary distribution for<br>discrete and continuous time semi-Markov process  |  |

| Thursday, 02 March 2023 |   |  |  |  |
|-------------------------|---|--|--|--|
| Plenary Session         |   |  |  |  |
| 08:30-09:30             | Talk 1: Semiparametric M-estimators and their applications in change-points<br>Prof. Salim BOUZEBDA<br>University   GI - Génie Informatique   LMAC –France<br>Chair : Prof. Mohamed CHAOUCH<br>University of Qatar, Qatar       |  |  |  |
| 09:30-10:30             | Talk 2 : Statistical inference based on divergence measures<br>Prof. Vlad Stefane BARBU<br>University of Rouen Normandy, France<br>Chair : Prof. Abderrahmane YOUSFATE<br>Djillali Liabes University of Sidi Bel-Abbès, Algeria |  |  |  |
| 10:30-11:00             | Coffee Break+ poster session(page 6/6)  |  |  |  |
| 11 :00-12 :00           | Talk 3 : <b>Fractional processes of order 1 with mixing errors</b><br><b>Prof. Karima BELAIDE</b><br>A.Mira University of Béjaia, Algeria<br>Chair: Prof. Vlad Stefane BARBU<br>University of Rouen Normandy, France            |  |  |  |
| 12:00-14:00             | Lunch Break   |  |  |  |

|              | Parallel sessions  |  |   |  |  |
|--------------|--|--|---|--|--|
|              | Room 1: Workshops<br>Chair: Prof. Karima BELAIDE<br>A.Mira University of Béjaia, Algeria                     | Room 2 : Workshops<br>Chair : Prof. KANDOUCI<br>Dr Moulay Tahar University of Saida,<br>Algeria  | Room 3: Workshops<br>Chair :Prof. Salim BOUZEBDA<br>University   GI - Génie Informatique  <br>LMAC –France                            |  |  |
|              | Mohamed SADOUN<br>On inference and forecasting in<br>periodic generalized integer-valued<br>AR (p) models    | <b>Elias Taki Eddine MOHAMED CHIKOUCHE</b><br>On the robust nonparametric regression<br>estimation: complete and censored data<br>cases. | <b>Rajaa HAZEB</b><br>Extropy-based goodness of fit tests   |  |  |
| 14:30-16:00  | Charef Eddine MANSOURI<br>Period determination using robust<br>regression for unevenly spaced time<br>series | <b>Elhadj HAMEL</b><br>Estimation of kernel conditional density<br>function under long range dependence.                                 | Mohamed KOUADRIA<br>Fixed-effects models  |  |  |
|              | Farouk METIRI<br>Some results on quadratic credibility<br>premium using the balanced loss<br>function        | <b>Mohamed ABEIDALLAH</b><br>Spatial Data Case : Conditional hazard<br>estimate by the local linear method                               | Houssem BRAIRI<br>Testing high-dimensional multivariate<br>discrete-valued time series for lack of serial<br>and<br>cross-correlation |  |  |
|              | <b>Baya TAKHEDMIT</b><br>Parametric uncertainty propagation<br>for financial models                          | <b>Amel AZZI</b><br>Robust estimation of the conditional<br>Mode in functional statistics  | Amel SAIDI<br>Testing for equal predictability of a<br>stationary two dimensionally indexed<br>autoregressive moving average model    |  |  |
|              |  |  | <b>Bahia BARACHE</b><br>Exponential inequalities for mann's stochastic<br>scheme with random errors                                   |  |  |
| 16:00-18 :30 |  | Closing ceremony   |   |  |  |

| Posters session          |  |  |  |  |
|--------------------------|--|--|--|--|
| Wednesday, 01 March 2023 |  |  |  |  |
|                          | Sakina BENKADDOUR<br>Hurst index estimation for the Rosenblatt process   |  |  |  |
|                          | Asma BOUCHAFAA<br>Comparative study of forecasting models on survey data   |  |  |  |
|                          | Hayat BOUKHERIS<br>Variations and estimators for self-similarity parameter of Q-sub-fractional Brownian motion                                       |  |  |  |
| 16:00-16:30              | Fatah CHEURFA<br>Sensitivity analysis of classical risk model based on multivariate probability bounds   |  |  |  |
|                          | Yamina DJAOUANI<br>On the volatility estimation via the Girsanov formule   |  |  |  |
|                          | <b>Rachida ROUANE</b><br>M-regression function estimate for continuous time stationary and ergodic data  |  |  |  |
| Thursday, 02 March 2023  |  |  |  |  |
|                          | Asma LADJEROUD<br>Statistical models of chaotic systems  |  |  |  |
|                          | <b>Fatima BENZIADI</b><br>Recursive non-parametric estimation of the conditional distribution function: Left truncated data under α-mixing condition |  |  |  |
| 10:30-11:00              | Fatiha MOKHTARI<br>Estimation and prediction of functional autoregressive processes with random coefficients   |  |  |  |
| 10.30-11.00              | <b>Tayeb DJEBBOURI</b><br>On the estimation of the derivative and the maximum of conditional hazard function   |  |  |  |
|                          | Kheira MECHERI<br>The uniform almost complete convergence of the conditional quantile in the functional single-index                                 |  |  |  |
|                          | Nada Riheb YATIM<br>Statistical analysis of a single-server Markovian feedback queueing model with balking   |  |  |  |