(Aix*Marseille
université
Socialement engagée

euraxess
RESEARCHERS IN MOTION

hr
HR EXCELLENCE IN RESEARCH

FICHE A COMPLETER POUR PUBLICATION D'EMPLOIS SCIENTIFIQUES (hors BIATSS) DANS LE PORTAIL « EURAXESS JOBS »

A COMPLTER EN ANGLAIS ET A RENVOYER à : **drv-euraxess@univ-amu.fr** en FORMAT WORD

❑ Cochez la case si vous souhaitez **aussi** publier dans **Academic Positions,** plateforme internationale d'emploi scientifique (si visibilité internationale requise par le poste) : dans ce cas **la durée de publication** – durée entre la date de publication et la date limite de candidature - **DOIT IMPERATIVEMENT être supérieure à 3 (TROIS) MOIS**.

Autres sites ou plateformes d'emplois où votre offre a été publiée
1.   2.   3.

JOB TITLE Two-year Postdoc position in Statistics and Probability

RESEARCHER PROFILE
❑ PhD / R1: First stage Researcher
x Postdoc / R2: PhD holders
❑ Researcher, Assistant Professor/ Senior Lecturer / R3: Established Researcher
❑ Professor, Tenure track / R4: Leading Researcher

RESEARCH FIELD(S)[1]: Mathematics
MAIN SUB RESEARCH FIELD OR DISCIPLINES[1]: Statistics

JOB /OFFER DESCRIPTION Applications are invited for a two-year full time post-doc position starting in September-October 2025 in the A*MIDEX Chaire d'Excellence-funded project "Nonstationary Models of Biological Signals" (NOMOS), Principal Investigator Prof. Anna Dudek. According to the requirements of this funding program, candidates should not be currently employed by the University of Aix-Marseille and should have obtained their last degree outside AMU. Interviews with candidates will be conducted in English. The selection process will proceed on a continuous basis, with applications reviewed and interviews conducted until the position is filled.

Project NOMOS Overview
Nonstationary signals are at the forefront of modern statistical analysis, as many observed phenomena cannot be adequately modeled by stationary processes. The NOMOS project aims to develop a new generation of nonstationary models and algorithms for analyzing various biological signals. The project will focus mainly on developing innovative models for biomedical signals with irregular cyclicity and exploring potential machine learning applications.

Position Objective: The primary focus of this position is to develop concentration inequalities in the nonstationary setting, specifically for periodic Markov chains and periodic time series. Responsibilities also include coding the proposed algorithms in R or Python, such as methods for

[1] **Academic Positions Research fields:** Agricultural Sciences – Anthropology – Architecture and Design – Arts and Culture – Biology – Chemistry – Computer Science – Business and Economics – Education – Engineering – Geosciences – History – Law – Linguistics – Literature – Mathematics – Medicine – Philosophy – Physics – Political Science – Psychology – Social Science – Space Science – Theology
Euraxess Research fields: Agricultural Sciences – Anthropology – Architecture – Arts– Astronomy – Biological sciences – Chemistry – Communication sciences - Computer Science – Criminology – Cultural Studies – Demography - Economics – Educational Science – Engineering – Environmental science – Ethics in Health sciences – Ethics in natural sciences – Ethics in physical sciences - – Geography - Geosciences – History – Information science – Juridical science – Language science – Literature Management sciences – Technology – Religious science – Sociology – Psychological sciences – Neurosciences – Pharmacological sciences – Mathematics – Philosophy – Medical sciences – Political sciences - Physics

FO-DRV-911 EURAXESS JOBS / ACADEMIC POSITIONS *AMU_DRV_MàJ Juillet 2023*

Aix-Marseille Université – Direction de la Recherche et de la Valorisation (DRV) - Pilotage de la Coopération internationale - www.univ-amu.fr

splitting periodic time series into regeneration blocks, and applying them to real biomedical datasets.

The role requires the ability to effectively communicate technical material and build both internal and external collaborations. Additional responsibilities may include assisting in the supervision of student projects, supporting the development of student research skills, providing instruction, or planning and delivering seminars related to the research area.

TYPE OF CONTRACT: ❑ PERMANENT   x TEMPORARY   ❑ TO BE DEFINED
JOB STATUS: x FULL TIME   ❑ PART TIME   ❑ NEGOTIABLE
HOURS PER WEEK _____
APPLICATION DEADLINE (If not applicable, report the envisaged staring date):): (30/11/2025) **The selection process will proceed on a continuous basis, with applications reviewed and interviews conducted until the position is filled & TIME** (16:00) GMT+1
ENVISAGED STARTING DATE: November-December 2025
ENVISAGED DURATION: 24 months
IS THE JOB FUNDED THROUGH AN EU RESEARCH FRAMEWORK PROGRAMME? ❑ YES x NO
If yes, please specify:

HOW TO APPLY (Please report ONE value; more contacts may be mentioned in the application process)
E-mail: aedudek@agh.edu.pl
Website:
WORK LOCATION(S): Institut de Mathématiques de Marseille (I2M, UMR 7373), 3 place Victor Hugo Case 19 13331 Marseille Cedex 3

WHAT WE OFFER: Salary according to the scale
Additional information: The Euraxess Center of Aix-Marseille Université informs foreign visiting professors, researchers, postdoc and PhD candidates about the administrative steps to be undertaken prior to arrival at AMU and the various practical formalities to be completed once in France: visas and entry requirements, insurance, help finding accommodation, support in opening a bank account, etc. More information on AMU EURAXESS Portal

QUALIFICATIONS, REQUIRED RESEARCH FIELDS, REQUIRED EDUCATION LEVEL, PROFESSIONAL SKILLS, OTHER RESEARCH REQUIREMENTS
Profile: strong background in statistics (PhD in statistics or probability). Expertise in Markov chains and concentration inequalities is highly desirable. Knowledge of R and/or Python.

---

[1] **Academic Positions Research fields:** Agricultural Sciences – Anthropology – Architecture and Design – Arts and Culture – Biology – Chemistry – Computer Science – Business and Economics – Education – Engineering – Geosciences – History – Law – Linguistics – Literature – Mathematics – Medicine – Philosophy – Physics – Political Science – Psychology – Social Science – Space Science – Theology
Euraxess Research fields: Agricultural Sciences – Anthropology – Architecture – Arts– Astronomy – Biological sciences – Chemistry – Communication sciences - Computer Science – Criminology – Cultural Studies – Demography - Economics – Educational Science – Engineering – Environmental science – Ethics in Health sciences – Ethics in natural sciences – Ethics in physical sciences - – Geography - Geosciences – History – Information science – Juridical science – Language science – Literature Management sciences – Technology – Religious science – Sociology – Psychological sciences – Neurosciences – Pharmacological sciences – Mathematics – Philosophy – Medical sciences – Political sciences - Physics

FO-DRV-911 EURAXESS JOBS / ACADEMIC POSITIONS *AMU_DRV_MàJ Juillet 2023*

Aix-Marseille Université – Direction de la Recherche et de la Valorisation (DRV) - Pilotage de la Coopération internationale - www.univ-amu.fr

FICHE A COMPLETER POUR PUBLICATION D'EMPLOIS SCIENTIFIQUES (hors BIATSS) DANS LE PORTAIL « EURAXESS JOBS »

A COMPLTER EN ANGLAIS ET A RENVOYER à : **drv-euraxess@univ-amu.fr** en FORMAT WORD

NOMOS is committed to promoting diversity and gender equality. Our selection process is based solely on merit, free from bias or stereotypes. We strongly encourage women to apply, and our recruitment efforts actively promote female participation. We will closely monitor gender balance to ensure equal opportunities for all selected candidates.

Soft skills: Ability to work in a team and independently, high communication skills, excellent ability to organize work, very good knowledge of English.

REQUESTED DOCUMENTS OF APPLICATION, ELIGIBILITY CRITERIA, SELECTION PROCESS
Applicants should include the following materials in their application:
1. their full **academic CV**, including a list of publications,
2. a **cover letter (max 1 page)**,
3. **two reference letters** to be sent directly by the referees to aedudek@agh.edu.pl

[1] **Academic Positions Research fields:** Agricultural Sciences – Anthropology – Architecture and Design – Arts and Culture – Biology – Chemistry – Computer Science – Business and Economics – Education – Engineering – Geosciences – History – Law – Linguistics – Literature – Mathematics – Medicine – Philosophy – Physics – Political Science – Psychology – Social Science – Space Science – Theology
Euraxess Research fields: Agricultural Sciences – Anthropology – Architecture – Arts– Astronomy – Biological sciences – Chemistry – Communication sciences - Computer Science – Criminology – Cultural Studies – Demography - Economics – Educational Science – Engineering – Environmental science – Ethics in Health sciences – Ethics in natural sciences – Ethics in physical sciences - – Geography - Geosciences – History – Information science – Juridical science – Language science – Literature Management sciences – Technology – Religious science – Sociology – Psychological sciences – Neurosciences – Pharmacological sciences – Mathematics – Philosophy – Medical sciences – Political sciences - Physics

FO-DRV-911 EURAXESS JOBS / ACADEMIC POSITIONS *AMU_DRV_MàJ Juillet 2023*

Aix-Marseille Université – Direction de la Recherche et de la Valorisation (DRV) - Pilotage de la Coopération internationale - www.univ-amu.fr