



Hosting offer for Marie Skłodowska-Curie Postdoctoral Fellowships (PF) 2022 at University of Cyprus / Department of Mathematics & Statistics and the Department of Economics

[MSCA Postdoctoral Fellowships](#) are individual research grants offering excellent postdoctoral researchers the chance to develop their skills by means of international mobility. Through the implementation of an original and personalised research project, MSCA Postdoctoral Fellowships aim to foster excellence through training and mobility and to equip researchers with new skills and competences in order to identify solutions to current and future challenges.

University of Cyprus / Department of Mathematics & Statistics and the Department of Economics invites motivated postdoctoral researchers to jointly prepare an application for the [MSCA-PF-2022 call Marie Skłodowska-Curie Postdoctoral Fellowships](#) call ([MSCA-PF-2022](#)) with them as host organisation.

Description of Hosting organisation/group

This is a joint project of the Department of Mathematics & Statistics and the Department of Economics and aims to help young researchers to develop computational and theoretical skills for proper financial data analysis. The project will run by K. Fokianos (MAS) and A. Kourtellos (ECON), who have been working on developing novel models for complex dependent financial data.

More details about their research can be found in the links provided below but they aim to understand complex financial relationships and develop innovative and applicable solutions. This is supported further by their publications that offer applied and theoretical insights into the analysis dependent data.

Both departments provide an excellent research environment for carrying out a research project. As part of the University, they have access to library, databases, and high-performance computing and can provide office space for hosting a young researcher. The Department of Mathematics & Statistics is recognized as the best place to study Mathematics and Statistics in Cyprus as it includes faculty with diverse research interests whose research has appeared in top international journals. In addition, the School of Economics and Management has lots of experience in hosting MSCA fellows and is extremely supportive throughout the action. The administrative head will be in charge of the management and coordination of the project, facilitating research progress. The School has hosted more than nine MSCA fellows in the recent past.

Konstantinos Fokianos [Konstantinos Fokianos \(researchgate.net\)](#)

Andros Kourtellos <https://sites.google.com/view/kourtellos>

Topics/expertise

A mainstream research topic is the analysis of high-dimensional dependent data. In this framework, financial data is a central theme and we are keen to explore innovative research in the following broad areas:

Nonlinear models, Spatio-temporal modelling, measures of dependence, big data, machine learning, clustering and prediction.

- **Konstantinos Fokianos**

Research interests of K. Fokianos include non-linear models for time series, network autoregressive models, multivariate count data, prediction, measures of dependence, robust inference, pairwise likelihood, penalized inference. His current work is on developing innovative methodology for non-linear multivariate autoregressive network models, inference on high-dimensional data by appropriate penalized methods and non-parametric clustering of time series. This line of research enables development of complex models, fitting and associated inference.

- **Andros Kourtellos**

Nonlinear models, threshold regression, macroeconomic forecasting, model averaging, Intergenerational mobility, inequality, social interactions, economic growth, mixed frequencies. In particular, his current work focuses on estimation and inference for a threshold regression model that allows for an endogenous threshold variable and a model that allows for threshold social interaction effects. These models are particularly useful for estimating multiple equilibria and poverty traps.

Your profile

We welcome postdoctoral candidates that wish to work on (i) local projections and Vector Autoregression estimators of structural impulse responses using big data; (ii) measures of dependence (e.g., local dependence) (iii) semiparametric spatio-temporal models or network autoregressive models and (iv) clustering

- Expected qualifications/expertise of the candidate: Statistical and Econometric theory, empirical modelling, programming skills in R and/or Matlab and/or Python. Some theoretical background on Probability Theory and/or optimization will be considered as an additional advantage.
 - Please specify the required PhD degrees if applicable: PhD in Statistics or Economics or related disciplines
- You must have a completed PhD at the time of the call deadline (14 September 2022).
- Candidates must have a maximum of 8 years full-time research experience from the PhD award date until September 14, 2022. Periods of inactivity in research (e.g. unemployment, periods of employment outside research, parental or sick leave) do not count towards the time of research experience.
- For European fellowships, candidates can be of any nationality and must not have resided or carried out their main activity (work, studies, etc.) in Cyprus for more than 12 months in the 36 months immediately before September 14, 2022.

- Highly motivated candidate with an excellent research track record appropriate to career stage, as evidenced by academic publications and other scientific output.

What we offer

- Support and guidance for the preparation of your MSCA PF proposal
- A stimulating, interdisciplinary environment for high-level research.

For more details contact: rss@ucy.ac.cy

How to apply?

Indicate your interest by contacting the host institution as follows:

Please contact Prof. Fokianos at fokianos@ucy.ac.cy or Prof Kourtellos at andros@ucy.ac.cy by email with a short CV and motivation to indicate your interest to prepare a MSCA-PF application.

After the supervisor agrees to support you as a MSCA-PF candidate, you can start preparation of MSCA PF project proposal and will be supported further by the Research Support Office of the host university. For more information please contact the MSCA coordinator of the host institution at rss@ucy.ac.cy