



Maynooth University Ollscoil Mhá Nuad

Department of Mathematics and Statistics

PhD Scholarship Statistical Modelling of High-Dimensional Spectral and Hyperspectral data.

Details of the Scholarship Award

The Department of Mathematics and Statistics at Maynooth University is pleased to announce that a PhD Scholarship will be available for a suitable qualified and successful applicant intending to commence their PhD studies in September 2025.

The successful candidate will be part of the VistaMilk Research Ireland research centre (www.vistamilk.ie), which represents a unique collaboration between 13 Agri-Food and ICT research institutes and leading Irish/multinational food and ICT companies. The Centre is hosted by Teagasc, the national agency with responsibility for agriculture and food research. **The PhD project will focus on the development of novel statistical and machine learning methodology for the analysis of high-dimensional spectral and hyperspectral data.** The research arises from the ever-growing abundance of such datasets in the agrifood sector and the practical limitations of the state-of-the-art methods; many cannot account for the repeated measures or the spatio-temporal correlations between samples, leading to biased analyses. A successful candidate will have a chance to work in cross-disciplinary collaborations.

Value of PhD Scholarship Award

The successful candidate will receive a tax-free stipend of €25,000 per year, full coverage of tuition fees and funds for conference travel. If desired, the candidate may also be considered for activities such as tutorials, laboratory demonstrations, marking and/or similar related work for which they will receive additional payment subject to University guidelines, policies and procedures.

Duration of PhD Scholarship Award

The scholarship is awarded for 4 years of study, subject to satisfactory annual academic progression.

Role of the Candidate

Starting in September 2025, the successful candidate will be based in the Hamilton Institute, Maynooth university, under the co-supervision of Dr Katarina Domijan and Dr Szymon Urbas.

Eligibility Criteria for Applicants

Minimum educational background: BSc (honours) or MSc degree at 2.1 grade or above (or equivalent) in Statistics/Mathematics or related discipline. Computational skills and experience with programming in R and/or Python are required. Candidates must have excellent written and verbal communication and presentation skills in English.

Application and Selection Process

To apply please e-mail szymon.urbas@mu.ie an electronic copy of your curriculum vitae and a letter of interest with names and emails of two academic references as a **single pdf** document. Please reference “PhD HSpec” in the subject line of the email.

All eligible candidates will be considered for open positions. Applicants may be shortlisted for interview and, if so, will be contacted directly by the Department. Late applications will not be considered.

Evaluation of applicants will commence on April 5, 2025, and will continue on a rolling basis until the position is filled. Only shortlisted candidates will be contacted.

Informal queries can be sent to Dr Katarina Domijan (katarina.domijan@mu.ie) or Dr Szymon Urbas (szymon.urbas@mu.ie)

Closing Date: Friday, 11 April 2025

Please submit applications directly to: szymon.urbas@mu.ie



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