



## SCHOOL OF ECONOMICS AND MANAGEMENT

Lund University

Department of Statistics

December 9, 2020

### **Response to the panel review of the Ph.D. Programme in Statistics**

#### **Area, Environment and Resources**

Following the recommendations of the panel, the Department will be solidifying its profile in the coming years with regards to spatial and temporal data, stochastic modelling, and high-dimensional statistics. It will furthermore aim to increase its profile in the computational methodologies of modern data science through hiring new junior faculty in these fields.

In the near future the Department will be losing several senior faculty members through retirement and leaves of absence. As pointed out in the review, if the Department is to maintain its ability to host a successful PhD programme it is necessary that retiring professors and other faculty members be replaced. The school needs to allocate resources to enable the formulation of a five-year strategic plan that addresses both hiring preferences and course development. In this way the Department will be able to create a larger research environment.

The currently active advisors have a rich network of international collaborators; however, this lacks transparency and is not sufficiently visible to the Ph.D. students. The Department therefore aims to make this network more accessible to the students, thereby creating more opportunities for them to go for short research visits that would expose them to a more diversified research environment. Another diversification could be achieved by establishing stronger ties with the Mathematical Statistics Division at the Mathematical Sciences Centre. In particular we aim to initiate joint meetings with them, which in a longer perspective could evolve into a joint seminar series. Our existing ties with the econometrics group at the Department of Economics could also be developed through more jointly run seminars that would focus on machine learning methods in economics.

Given the proposed growth of faculty members with active research profiles, we could like expand the program to about eight Ph.D. students. We therefore appreciate the suggestion from the panel that a path to this long-term goal could be jump-started by the School through funding two more Ph.D. students in the near future.

#### **Design, implementation and outcomes**

At the moment the Department does not have any collaborative projects focused on specific applications of statistical methodologies to the analysis of real data. In particular, there are no ongoing projects with industrial or governmental partners. On the other hand, the methodologies that are currently being developed at the Department have a strong potential to be applied in a practical context. We share the view of the panel that the programme would

benefit from establishing such collaborations and the Department will be alert to opportunities to identify partners and to facilitate collaborative projects involving Ph.D. students. In particular, considering the current policies of the Swedish government, it would be of particular interest to develop collaborative research concerning sustainability issues. To realize this potential the Department, with the support of the School, needs to initiate efforts to attract and hire new faculty members that have research profiles in line with the above goals.

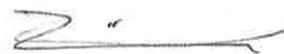
To conclude, the most challenging task for the Department is to build a larger research environment so that the Ph.D. programme can grow and prosper. This can only be accomplished if there is clear support and assistance from the School.



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until 20-12-31



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Jonas Wallin  
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