Bachelor's project in statistics/probability theory

In the 3rd year of the Bachelor's degree in mathematics, you complete a 10 ECTS Bachelor's project. If you have chosen the study direction in statistics, a Bachelor's project in statistics or probability theory is recommended. Below are examples of subject areas. Most topics can be looked up on Wikipedia if you want to know more about them.

Please choose your top 3 favorite topics from the listed subjects and write them in a prioritized list on this form. Those who are writing their Bachelor's project in the spring submit the form no later than **the second Monday in November**. A few students write their Bachelor's project in the fall, and they submit the form no later than the first **Monday after Easter Monday**.

The form should be sent the program responsible for the master's education in statistics: Ute Hahn: ute@math.au.dk**.**

At the end of November (or mid-May for fall Bachelor's projects), a list with the distribution of students and supervisors will be published. The list can be found on the noticeboard in the "statistics corridor" (bld. 1535, 3. floor).

The following topics can be applied for:

1. **Extreme Value Theory** – (ABOC, MK)
2. **Multiple testing** (UH)
3. **Survey Sampling** (MK)
4. **Biostatistics & Statistical Methods in Bioinformatics** (AH, LNA, RL)
5. **Stochastic Processes** (ABOC, JP, ST, FB)
6. **Applications of multivariate stochastic processes** (AH, TK)
7. **Infinitely Divisible Distributions** (ABOC, JP, ST)
8. **Time Series Analysis** (JP, TK)
9. **Spatial Statistics** (MK, UH, CH)
10. **Asymptotic Statistics** (ABOC, JLJ, JP, TK, ND)
11. **Markov Processes** (ABOC, JLJ, UH, CH)
12. **Point Processes** (MK, UH, CH)
13. **Stochastic Matrices** (ST, ND)
14. **Brownian Motion** (ABOC, JP, FB)
15. **Gaussian Processes in Machine Learning** (LNA)
16. **Multivariate Models** (RL)
17. **High-dimensional Statistics** (JLJ, ND)
18. **Modern Regression Analysis** (LNA)
19. **Generalized linear [mixed] models** (RL)
20. **Bayesian Networks and Graphical Models.** (ABOC)
21. **Random Constraint Satisfaction Problems.** (ABOC)
22. **Other**

The supervisors are: Andreas Basse-O'Connor (ABOC), Asger Hobolth (AH), Christian Hirsch (CH), Fabrice Baudoin (FB), Jan Pedersen (JP), Jens Ledet Jensen (JLJ), Lars Nørvang Andersen (LNA), Markus Kiderlen (MK), Nina Dörnemann (ND), Rodrigo Labouriau (RL), Steen Thorbjørnsen (ST), Tim Kutta (TK), Ute Hahn (UH).

Please indicate: ☐ **math (specialization in statistics)** ☐ **math-econ** ☐ **data science** ☐ **math (other)**

I would like to write my project ☐ **spring** ☐ **autumn 20_____**

NAME_____ STUDYNUMBER: _____

FIRST PRIORITY: _____ SECOND PRIORITY: _____ THIRD PRIORITY: _____

COMMENTS: (required if you have selected `other'):

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