

PhD position

Eindhoven University of Technology

There is currently an opening for a 4 year PhD student to work with dr. Pierre Nyquist in the Department of Mathematics and Computer Science at Eindhoven University of Technology. The position is part of an NWO grant on “Analysis meets Stochastics: Scaling limits in complex systems”.

The successful candidate will work on topics at the interface between analysis and probability, the specific direction will be tailored to the candidate’s interests. Some examples of potential topics are: large deviations for interacting particle systems and associated gradient flows and PDEs, advanced Monte Carlo methods and rare-event simulation, asymptotics and algorithms for random graphs, probability in high dimension and statistical learning theory. There is particular interest in the general topic of mathematical models for complex data. Although the work will be fundamental in nature, there is also an interest in applications in areas such as chemical physics, power grids, statistics and operations research.

The Department of Mathematics and Computer Science provides an excellent environment for the proposed type of research, housing leading experts in both analysis and probability. The successful candidate will join a lively international group of researchers and have the opportunity to interact with members of both the CASA group (analysis) and the STO group (probability and operations research). Additional initiatives such as the Institute for Complex Molecular Systems (ICMS) and the Data Science Center (DSC/e) provide further opportunities for both intra- and interdisciplinary research projects and collaborations, depending on the interests of the student. The Department also hosts EURANDOM, one of the more important international centers for researchers in all areas of stochastics.

For further information about the PhD position please contact dr. Pierre Nyquist by e-mail: p.k.u.nyquist@tue.nl<mailto:p.k.u.nyquist@tue.nl>