

## \*\* PhD positions in Probability \*\*

In the Probability group at Leiden University and the Applied Probability group at Delft Institute for Applied Mathematics

there are vacancies for two PhD students, one in each group.

### Project Description

The aim of the project is to advance the theory of duality for Markov processes in the context of population dynamics and interacting particle systems in random environment. In Leiden the focus will be on genetic models with seed-bank and the effect of migration on the evolution of the population. In Delft the focus will be on condensation phenomena for models of heat conduction in inhomogeneous media.

The project is funded through the TOP1 NWO grant "Duality for Interacting Particle Systems" of Frank den Hollander (Leiden University), Frank Redig and Cristian Giardina` (Delft University of Technology). The two PhD students are expected to work in close collaboration with each other and with the three supervisors, as a team.

#### Starting Date

January 1, 2019.

#### Job requirements

We are looking for a candidate that meets the following requirements:

- a solid background in Applied Mathematics, with an interest in probability theory, interacting particle systems, Markov processes;
- detailed knowledge of analysis, probability theory and

stochastic processes, as demonstrated by a relevant Master;

- an interest in cross-topic collaboration between different fields of mathematics with applications to physics and/or biology;
- candidates from non-Dutch or non-English speaking countries should be prepared to prove their English language skills;
- good communicative skills in English, both in speaking and in writing.

We offer

- a challenging job in a dynamic and highly ranked University;
- collaboration in an excellent research environment, with many young PhD candidates, postdocs, and young staff members;

- full-time employment as a PhD-candidate for a period of 4 years;
- a gross salary of 2222 Euros per month in the first year increasing up to 2844 Euros in the fourth year;
- annually 8% holiday allowance and 8.3% end of year allowance;
- support with your personal development and career planning including courses, summer schools, conference visits etc.;
- a broad package of fringe benefits (including an excellent technical infrastructure, child care, moving expenses, savings schemes, coverage of costs of publishing the dissertation and excellent sports facilities).

As part of an equal opportunity scheme, women are encouraged to apply.

Attaining a PhD at Leiden University or Delft University

of Technology  
provides you with excellent career opportunities.