

## **Introduction TRAIL PhD Council members**

*(in alphabetical order)*

**Name: Ties Brands**

**University representative of University of Twente**

**Research Topic:** designing an optimal multimodal transport network for the Randstad area, with respect to different aspects of sustainability, like environmental impact, accessibility and livability. The research framework consists of a multi-objective optimization heuristic and a fast network assessment module, which results in a set of Pareto optimal solutions. The outcome of this process is a set of possible future networks and their properties, which allow policy makers to make a proper trade off. It is project 3 of the SRMT program, within the DBR program of NWO, see [here](#).



**Background and Interests:** Education in Civil Engineering and Management, specialization Traffic Engineering and Management and in Applied Mathematics, specialization Discrete Mathematics and Mathematical Programming. Thesis in Optimization of dynamic road pricing measures. Interests are in Multi-objective optimization, network design, multimodal transport networks, sustainability objectives, public transport modelling.

**Name: Raymond Hoogendoorn**

**University representative of Delft University of Technology**

**Research topic:** Theory and mathematical modeling of driving behavior adaptation under exceptional conditions (e.g. evacuations, adverse weather conditions, incidents). This research project is part of the NWO Vici project Travel Behavior and Traffic Operations in case of Exceptional Events, see also: [here](#)



**Background and interests:** Education in Psychology, specialized in adaptation effects in longitudinal driving behavior represented in mathematical car-following models in case of exceptional events.

**Name: Evelien van der Hurk**

**University representative of Erasmus University Rotterdam**

**Research Topic:** Analyzing and modelling passenger behavior in public transport, studying the rail network as a complex network and using (new) informedness of operator and passenger in quantitative models for passenger oriented disruption management. This project is carried out in cooperation with the Department of Logistics of Netherlands Railways and is within the NWO Complexity program.



**Background & Interests:** Education in Econometrics & Operations Research, specialization Quantitative Logistics and OR, thesis in OR & Healths Care. Interests are in Complexity Theory, Behavioral modeling, Quantitative modeling - e.g. robust and stochastic optimization, prediction models, statistical analysis/clustering techniques-, and public transport and public transport networks, especially railways.

**Name: Sara Levy**

**University representative of Radboud University Nijmegen, Institute for Management Research.**

**Research Topic:** Modeling multi-actor decision-making and its effect on the integration between transport and land use. In this project, an agent-based modeling is used to model the interplay between decisions of different actors in transport and land use, and the emergent land use patterns. This project is carried out in the framework of NOW's Sustainable Accessibility of the Randstad program.



**Background & Interests:** Sara was born in Lisbon, Portugal. She has an MSc. in Environmental Engineering. She also did a post-grad in Engineering Policy and Management of Technology. She is interested in Urban transport, Spatial Planning, Urban Dynamics, Policy Analysis and Behavioral Economics.

**Name: Diana Vonk Noordegraaf**

**University representative of Delft University of Technology**

**Research Topic:** implementation of advanced road pricing policies. This research investigates attitudes and behavioral responses of different actors (policy actors, employers, firms) towards road pricing and a mobility management measure based on subsidies called 'Peak Hour Avoidance'. The four parts of this research focus on the impact of road pricing on firms (their behavioral responses with respect to their road freight transport), policy actors' attitudes towards road pricing and Peak Hour Avoidance, the technology choices for advanced road pricing policies from a systems perspective (how technology choices affect the implementation of a policy) and employer attitudes towards Peak Hour Avoidance. The design implications of these actors' attitudes are studied as well.



**Background and Interests:** Education in Systems Engineering Policy Analysis and Management (SEPAM) at the faculty of Technology, Policy and Management, specialization in transport. Interests are in multi-actor complexity and design implications of stakeholder perceptions for advanced road pricing instruments.