



# VVSOR

## Chasing Gold: The Promise and Pitfalls of Optimisation

Annual meeting, March 5, 2026

### **Annual Meeting of the Netherlands Society for Statistics and Operations Research (VVSOR)**

*Thursday March 5, 2026*

10:15 – 17:45

het Trippenhuis

Kloveniersburgwal 29, 1011 JV Amsterdam

This years Annual Meeting theme is the promise and pitfalls of optimisation. The following keynote speakers will cover different perspective on this years theme:

- dr. Sophie Huijberts (LIMOS, CNRS)
- prof. dr. Rob van der Mei (CWI, VU Amsterdam)
- prof. dr. Ben van Calster (KU Leuven)

This year's Annual Meeting will be at het Trippenhuis in Amsterdam. We will have a general assembly for members in a hybrid setting, followed by the actual event with three keynote speakers, two short presentation sessions and two award presentations. The AM 2026 will be in English.

Attending the meeting at het Trippenhuis (including drinks and lunch) costs 75 euro (non-members: 135 euro). Reduced price for students: 25 euro. Additional registration is required for dinner and pubquiz, that will also be at het Trippenhuis.

Please register on the vvsor-website  
<https://www.vvsor.nl/vvsor-annual-meeting>

## DATE

Thursday, March 5, 2026

## VENUE

Het Trippenhuis, Kloveniersburgwal 29, 1011 JV Amsterdam

## REGISTRATION

Registration for the conference is mandatory at <https://www.vvsor.nl/vvsor-annual-meeting>. Detailed information can be found on our website.

## LANGUAGE

The talks at the annual meeting will be in English.

## ALGEMENE LEDENVERGADERING (ALV)

The Annual General Meeting of members (ALV) takes place on March 5, 10:15 – 11:00. The relevant documents will be e-mailed two weeks before the meeting.

## SNACKS AND DRINKS

Lunch and drinks during the breaks will be provided.

## DINNER WITH PUBQUIZ

Dinner at het Trippenhuis, Amsterdam. The pubquiz will be organized by the Young Statisticians.

## ORGANIZING COMMITTEE

The Annual Meeting is organized by a special committee in cooperation with the board of the VVSOR. For questions, contact the organizers by email at [annualmeeting@vvsor.nl](mailto:annualmeeting@vvsor.nl).

**PLEASE REGISTER BEFORE March 1**

09:45- 10:15	<b>Registration + coffee &amp; tea</b>
10:15- 11:00	<b>ALV, General Assembly (members only)</b>
11:00- 11:20	<b>Break &amp; Registration</b>
11:20- 11:35	<b>Prof. dr. ir. Geurt Jongbloed   Welcome &amp; Opening of the AM 2025</b>
11:35- 12:15	<b>The simplex method: what theory can learn from practice</b> dr. Sophie Huiberts LIMOS, CNRS
12:15- 12:45	<b>Short presentations (session 1)</b>
12:45- 13:40	<b>Lunch break</b>
13:40- 14:30	<b>Ceremony of the Willem R. van Zwet Award and the Jan Hemelrijk Award</b> Prize winners will be presented by the juries, followed by a short presentation by the laureates
14:30- 15:10	<b>Saving lives with mathematics: the bumpy road from mathematical optimization to a successful company</b> prof. dr. Rob van der Mei CWI, VU Amsterdam
15:10- 15:30	<b>Short break</b>
15:30- 16:00	<b>Short presentations (session 2)</b>
16:00- 16:40	<b>Prediction modeling for health-care: chasing gold or chasing pavements?</b> prof. dr. Ben van Calster KU Leuven
16:40- 16:45	<b>Wrap up &amp; Finish</b>
16:45- 17:45	<b>Drinks</b>
18:00- 21:00	<b>Dinner + Pubquiz at het Trippenhuis (extra registration required)</b>

## Key note speaker 1

11:35- 12:15

### The simplex method: what theory can learn from practice

dr. Sophie Huiberts

LIMOS, CNRS

Linear programming has been a major success of operations research, in part due to the observed ability to solve these problems quickly using the simplex method. This efficiency is not reflected in classical theory, which misleadingly suggests that the simplex method can require exponential time to converge to an optimal solution. This has led to confusion for users. So for many decades, theorists have chased a better understanding of the simplex method's performance. In this talk, I will describe the latest promising angle of research. We look at open-source software implementations and user manuals in order to inform our understanding of what the simplex method really is, and what practical linear programming problems look like. We use this knowledge to formulate novel assumptions, which we can use to prove better theorems.

dr. Sophie Huiberts is a researcher at CNRS in the LIMOS lab at Université Clermont Auvergne. Her thesis on linear programming won the Gijs de Leve Prize and the Stieltjes Prize.  
E-mail: sophie@huiberts.me

## Key note speaker 2

14:30- 15:10

### Saving lives with mathematics: the bumpy road from mathematical optimization to a successful company

prof. dr. Rob van der Mei

CWI, VU Amsterdam

In life-threatening situations where every second counts, the timely presence of emergency services can make the difference between survival or death. In this talk, I will showcase a success story where mathematical modeling, data analytics and stochastic optimization have been successfully applied in

real-life practice, ultimately saving lives. In addition, I will address the challenges and my own experiences involved in bringing academic research into the practice of a successful company.

prof. dr. Rob van der Mei is a Principal Researcher & Strategist at CWI and a Full Professor of Applied Mathematics at the VU Amsterdam. Before going to academia, he has been working for over a decade as a researcher and consultant in ICT systems, employed by The Royal Dutch PTT, AT&T Labs USA, KPN and TNO. His main research activities are in the area of Stochastic Operations Research, at the challenging interface of theory and application. In 2021, he received the prestigious Huibregsten Prize for his groundbreaking work in bringing mathematics into practice, together with Sandai Bhulai. Rob is co-author of over 250 papers in peer-reviewed journals, proceedings and professional journals.  
E-mail: mei@cwi.nl

## Key note speaker 3

16:00- 16:40

### Prediction modeling for healthcare: chasing gold or chasing pavements?

prof. dr. Ben van Calster

KU Leuven

Prediction modeling in healthcare is booming nowadays. There is interest in novel methodology for model optimization to keep finding small improvements in model performance. I argue that too strong focus on chasing such gold may lead to chasing pavements (i.e. unproductive). Ultimately, these models are aimed to support clinical practice. Working towards that aim, modelers face several sources of uncertainty. Estimation uncertainty refers to sample size and complexity, and hence relates to overfitting and penalization/regularization. Model and modeler uncertainty refer to the existence of many different yet acceptable approaches for model development. Finally, applicability uncertainty refers to variability in data measurement procedures and heterogeneity between populations. Taken together, these uncertainties may eclipse small theoretical gains regarding model optimization.

prof. dr. Ben van Calster is Professor of Medical Statistics at Dept of Development and Regeneration, KU Leuven, Belgium Leuven Unit for Health Technology Assessment Research (LUHTAR), Leuven, Belgium Dept of Data Science and Biostatistics, UMC Utrecht, Netherlands Dept of Metabolism, Digestion and Reproduction, Imperial College London, UK  
E-mail: ben.vancalster@kuleuven.be

## Short presentation (session 1)

12:15-12:45

### Informational advantage in speed skating

**prof. dr. Ruud Koning**

*Rijksuniversiteit Groningen*

In speed skating, the final ranking is based on the finish times of all participants at a given distance. Hence, an individual skater competes against all participants, even though (s)he has only one direct competitor in a race. As a consequence, later skaters have a potential informational advantage over earlier skaters: they know which finish time they have to beat in order to lead the intermediate ranking. In this talk, I will show whether or not this effect exists.

**prof. dr. Ruud Koning** is Professor by Special Appointment in Sports Economics via the W.J.H. Mulier Institute (a centre for socioscientific sports research). He graduated 'cum laude' in Econometrics at the University of Groningen in 1988 and in 1995 he gained his PhD at the same university with a thesis entitled 'Essays on applied microeconomics'. Since then, he worked as Academy Researcher and spent time at Brown University in the US. He has been active in research at the interface of economics, statistics and sport for a considerable time now, focusing, for example, on measurement and determination of competitive balance in different sports, market mechanisms in professional football (for the Ministry of Economic Affairs), and the informational content of prices on betting markets. He has extensive experience with prediction models for analysing large-scale football tournaments.

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## Short presentation (session 1)

12:15-12:45

### Just basins: justice-explicit river basin modeling

**Damla Akoluk, MSc**

*Technische Universiteit Delft*

River basin models have long optimized for efficiency, resilience, or sustainability, but rarely for justice. Yet transboundary basins such as the Zambezi embody many of the world's freshwater tensions, where unequal power, asymmetric benefits, and contested rights to development define cooperation. Conventional models fall short because they privilege aggregate efficiency while obscuring who gains, who sacrifices, and whose risks matter.

We present a justice-explicit river basin modeling framework that integrates distributive justice metrics as core design principles within an evolutionary decision-support architecture. The framework tests a wide range of distributive justice metrics alongside our proposed robust justice metric designed to overcome key shortcomings of purist metrics, making justice assessments more context-aware and policy-relevant. Applied to the Zambezi River Basin, a deeply uncertain and politically contested system linking water, energy, and food priorities, the framework quantifies justice jointly with system performance and robustness.

Our results will show how justice-explicit modeling can expose hidden asymmetries, reshape planning and management strategies, and support fairer, more transparent water governance under hydrologic and geopolitical stress.

**Damla Akoluk, MSc** is a PhD candidate at TU Delft, specializing in AI-based method development for ethically informed policy design. Her research focuses on developing scalable, multi-dimensional decision-support systems to help manage complex, deeply uncertain environments, including river basin modeling, climate mitigation, and sustainable resource management.

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## Short presentation (session 2)

15:30-16:00

### An agentic AI framework to support challenge recruitment

dr. Inez Zwetsloot

Universiteit van Amsterdam

In recent years, challenge-based education has gained momentum, providing students with the opportunity to apply their skills to real-world problems. However, the recruitment of these challenges often falls to faculty members, adding to their administrative workload. The emergence of artificial intelligence (AI) presents new opportunities to alleviate such burdens through intelligent process automation.

This paper introduces an Agentic AI Framework for Intelligent Process Automation, specifically designed to streamline the recruitment of challenges in educational settings. The system leverages generative AI agents to process diverse inputs—including meeting notes, voice commands, and typed instructions—automatically summarizing key information, maintaining an up-to-date database, and generating follow-up emails.

Preliminary results demonstrate that the system saves approximately 15–25 minutes of processing time per recruited challenge, lightening the administrative load on faculty. This work showcases the potential of generative AI to enhance administrative workflows.

dr. Inez Zwetsloot is an associate professor in the Department of Business Analytics, University of Amsterdam. Her research interests include quality of AI, statistical process monitoring and data science. She received the Feigenbaum Medal (2022) from ASQ and the young statistician award from ENBIS (2021). She is director of the AI4Business Lab at UvA EB.

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## Short presentation (session 2)

15:30-16:00

### From algorithms to business cases in large water utility

dr. Mario Castro-Gama

VITENS

Digital technologies and advanced analytics are reshaping the way drinking water utilities design, operate, and justify their investments. Yet, while algorithms and data-driven tools are becoming increasingly sophisticated, their real value only emerges when they are successfully translated into robust business cases that support strategic decision-making.

This presentation explores the journey from algorithms to business impact within large water utilities. It highlights how data science, artificial intelligence, and optimization models can move beyond proof-of-concept and pilot projects to become implemented, value-generating analytics. By focusing on relatable issues of drinking water utilities such as network monitoring (i.e. quantity and quality), the presentation demonstrates how utilities can transform advanced algorithms into actionable insights and credible business cases. Drawing on practical experience, the presentation examines common challenges such as the gap between technical performance and business relevance.

The talk emphasizes the importance of aligning analytical solutions with operational needs, financial objectives, and long-term asset management strategies. It discusses how to frame analytics outcomes in terms of cost efficiency and service reliability, that resonate with executives, regulators, and stakeholders alike.

dr. Mario Castro-Gama is a Civil Engineer, with a MSc in Hydroinformatics from the IHE-Delft Institute for Water Education and a PhD in optimisation of large water supply systems from TU Delft. His expertise lies between Water Science engineering and Hydroinformatics. Since 2021, Mario is senior specialist for underground infrastructure at Vitens N.V, the largest drinking water company in the Netherlands. In his capacity, he leads and contributes to various innovation initiatives within the realm of drinking water distribution and applied informatics.

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