VvL

Newsletter Vereniging voor Logica

Summer Edition - July 2025

Message from the Board

Welcome to the summer edition of the VvL newsletter! As the season unfolds, we are happy to advertise upcoming events and initiatives in different cities in the Netherlands, as well as reflect on the ones that recently took place. Be sure to scroll down for insights from two of our new members.

If you have any comments or suggestions, or if you would rather not receive this newsletter, please click here to unsubscribe.

Members of the VvL

- The VvL currently has **301 members**. Compared to the last newsletter in October 2024, this is an increase of **4%** (and 8 members). If you meet potential new members, don't hesitate to encourage them to apply!
- We have members from many different institutions, based in Amsterdam, Utrecht, Groningen, Nijmegen, Tilburg, Eindhoven, Delft, Twente, Leiden and Rotterdam, and we even have some internationally based members.
- Among the 167 most recent membership registrations, 18% are bachelor or master students, 34% are PhD students, 34% are other academic staff, and 14% fall under logic alumni working outside an academic setting and members from the general public.

News

- **Dutch Logic PhD Day 2025.** The Dutch Logic PhD Day is a yearly event that aims to connect PhD students in logic and related areas from all over the Netherlands. We hope that this will encourage collaborations and the exchange of ideas between PhD students, leading to a more unified Dutch research community in logic for young researchers. Besides the main speakers, the event provides the opportunity for PhD students in the Netherlands to present about their own research. The Dutch Logic PhD Day 2024 took place at VU University (Amsterdam) on June 21, and was a great success! If you are a PhD student in the Netherlands and interested in organizing DLPD 2025, don't hesitate to contact info@verenigingvoorlogica.nl.

- **VvL Master's Thesis Award 2025.** The VvL is happy to announce the winners of the VvL Master's Thesis Award 2025. Any Master's thesis with a topic in logic or in philosophy of the exact sciences (interpreted broadly, including, for example, foundations of mathematics and computer science, applications in artificial intelligence, models of cognition, causal inference, and the formal study of natural language) was eligible to be nominated for the award. The Master's thesis prize committee has evaluated this year's submissions, and were extremely impressed by the breadth and quality of the

submissions. The winners are:

- Lingyuan Ye (Amsterdam, Master of Logic). Supervisor: Benno van den Berg. Thesis title: "Algebraic Monoidal Model Categories and Path Category Structures for Effective Kan Fibrations".

- Andreea Minculescu (Groningen, Masters in AI). Supervisors: Rineke Verbrugge, Harmen de Weerd and Jakob Dirk Top. Thesis title: "Cutting Cheryl's Birthday cake: Modeling theory of mind orders in public announcement logic".

- **In Memoriam: Kees Doets (1941–2024).** On November 5, 2024, Kees Doets passed away. Until his retirement in 2002, he was associated with the Institute for Logic, Language and Computation (ILLC). Kees Doets was an exceptionally gifted teacher, combining concise presentation with clarity and precision, and he influenced many generations of students through his courses "Introduction to Mathematical Logic," "Model Theory," and "Set Theory."

  To commemorate Kees, a website has been created at https://resources.illc.uva.nl/emeriti/Kees-Doets/, featuring an obituary, a complete list of his publications, and personal statements by his friends and colleagues. In particular, thanks to his family, his unpublished lecture notes from the Zermelo–Fraenkel Set Theory course are now available online at https://resources.illc.uva.nl/emeriti/Kees-Doets/Publicaties/. These notes cover constructible sets, forcing, and iterated forcing, and include more than 250 exercises with selected solutions.

- **In Memoriam: Wim Veldman (1947-2024).** On November 30, 2024, intuitionistic mathematician Wim Veldman passed away. He studied mathematics (and theology) in Nijmegen. He stayed at the mathematical institute and wrote his PhD-thesis on intuitionistic descriptive set theory, under supervision of Johan J. de Iongh, who had known L.E.J. Brouwer personally and introduced Wim to intuitionistic mathematics. Wim Veldman has taught and supervised generations of students at Radboud University, until years past his retirement in 2012.

  In his work and education, Wim always liked to stay close to the source. Over the years, Wim's own work in constructive and intuitionistic mathematics has become a unique source of knowledge and inspiration in itself. Many former students have preserved the beautifully handwritten syllabi - which present deep contents with humility and care, conveying both awe for the beauty of pure mathematics and profound joy in sharing it with others.

  Wim Veldman has kept developing his thoughts and writings for as long as he could. It has been hard for him, and for us, to accept the finiteness of his physical presence. However, his mind will transcend in the life and work of those he touched with his.

  Francien Dechesne, with thanks to Herman Geuvers and Franka Waaldijk

- **In Memoriam: Shengmen Luo (2001-2025).** It is with deep sorrow that we commemorate the passing of Shengmen Luo, a cherished member of the logic community in Amsterdam and Beijing. From his undergraduate studies at Tsinghua University to his time in the Master of Logic programme at the University of Amsterdam (ILLC), Shengmen distinguished himself as a gifted and curious scholar—always well prepared and asking thoughtful questions on logic and philosophy.

  Beyond his academic talents, Shengmen was a passionate musician. He composed and performed his own works in both formal recitals and intimate gatherings. His rendition of Messiaen's Vingt Regards sur l'Enfant-Jésus at the 10-year anniversary of the ILLC/UvA–Tsinghua collaboration remains a vivid memory for all who attended.

  Admired for his kindness, humility, and quiet brilliance, Shengmen leaves behind the gift of memory: conversations shared, music played, and ideas explored. On April 7, 2025, colleagues and students gathered in the ILLC common room (Science Park 107) to honour his life and legacy.

A link to the full memoriam is available here: https://msclogic.illc.uva.nl/In-memoriam-Shengmen-Luo/

Upcoming Events

- **October 8, 2025 — Logic at Large Lecture 2025 (Samson Abramsky).** The VvL Logic at Large Lectures are annual, public lectures organized for a general audience. Over the past three years, renowned international speakers have presented interesting talks, including Moshe Vardi on computer science and logic, Joel Hamkins on infinite games, and Lukasz Kaiser on OpenAI. The Logic at Large Lecture 2024 was given by Larry Moss, who spoke on "*A Place for Logic in the Computer Processing of Language*". If you missed this edition but you would still like to see it, you can watch the lecture on the VvL website. The lecture will be given online, stay tuned for more information.

Past Events

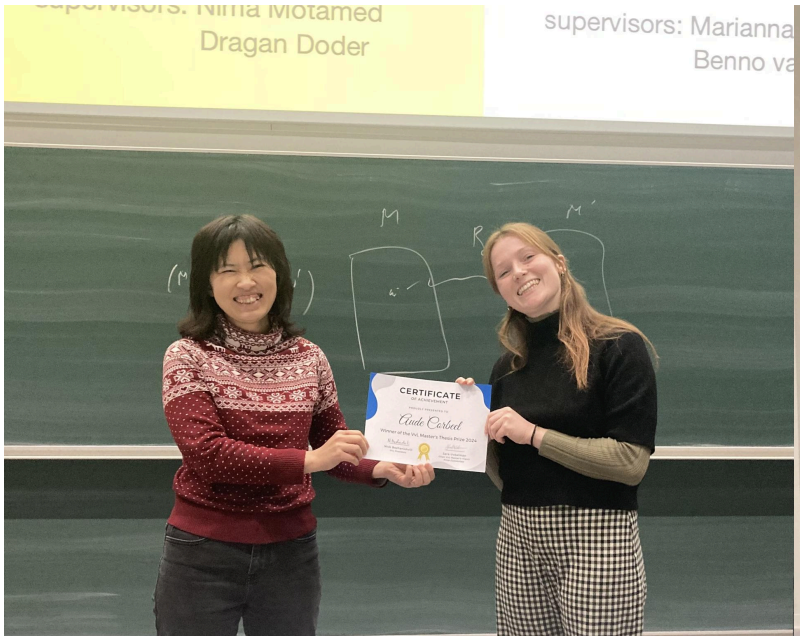
- **VvL Essentials (November 29)**. *VvL Essentials* talks are relatively high-level and broad overviews that introduce early-career logicians and logic-adjacent researchers to a field they may not be familiar with. This forms a low-threshold way to broaden their knowledge of the field at large, and encourages collaborations. The third edition, organized by Nima Motamed, Giovanni Varricchione (PhDs at UU), and Rodrigo Almeida (PhD at UvA) was in **Algebraic Logic Essentials** at the VU (Amsterdam), featuring speakers Apostolos Tzimoulis and Giuseppe Greco. We look forward to many future aditions.

- **VvL Annual Seminar 2024 (December 13).** The third edition of the VvL Annual Seminar took place on **December 13** at the *University of Eindhoven and* was organized by Vlasta Sikimić. The main speaker of the event was Alexandru Baltag, after which an awards ceremony was held for the winners of the MSc Thesis Award 2024, who were given the opportunity to present their theses. An impression of the event is given by the pictures below, featuring the organizers, and the certificates handed over to the winners Aude Corbeel, Sterre Lutz, Ruben Mud and Valentin Müller by thesis prize committee member Fan Yang. This year's edition will surely be another success!

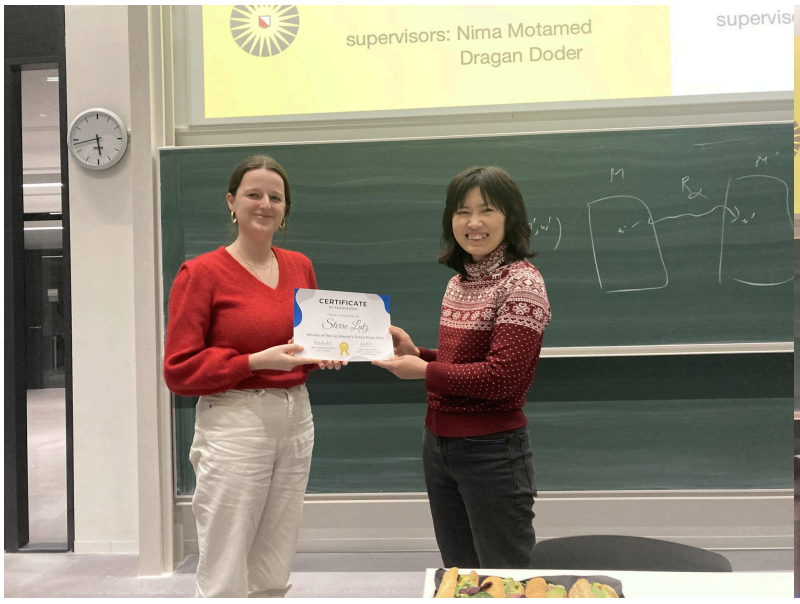
- **Book launch — 'Dick de Jongh on Intuitionistic and Provability Logics' published by Springer (June 18).** The book entitled `Dick de Jongh on Intuitionistic and Provability Logics', part of the series Outstanding Contributions to Logic, and edited by Nick Bezhanishvili, Rosalie Iemhoff and Fan Yang, has been published by Springer. The book which begins with an autobiographic note by Dick de Jongh can be dowloaded from this link. For more information, see https://link.springer.com/book/10.1007/978-3-031-47921-2 or contact Dick de Jongh at d.h.j.dejongh@uva.nl. The event took place on **June 18, 2025** at Science Park 107 https://sites.google.com/view/dick-de-jongh-book-launch.


Foundation
VvL has a long history.
It was founded on 15 November 1947 by E.W. Beth, A. Heyting and A.G.M. van Melsen.
Beth (1908 - 1984)
Heyting (1898 - 1980)
van Melsen (1912 - 1994)
EINDHOVEN UNIVERSITY OF TECHNOLOGY


The dynamic logic of causality:
from counterfactual dependence to causal intervention
Alexandru Baltag
(ILLC, University of Amsterdam)


supervisors: Nima Motamed
Dragan Doder
CERTIFICATE
Aude Corlet


supervisors: Nima Motamed
Dragan Doder
CERTIFICATE


supervisors: Nima Motamed
Dragan Doder
CERTIFICATE
Sterre Lutz


Sterre Lutz
Utrecht University
supervisors: Nima Motamed
Dragan Doder
Valentin Müller
ILLC, University of Amsterdam
supervisors: Marianna Girlando
Benno van den Berg
CERTIFICATE
Valentin Müller
EINDHOVEN UNIVERSITY OF TECH

Geef de Pen Door

In this section, a VvL member introduces themselves, so that the association can get to know its diverse collection of members better. For the sixth edition, Mina Pedersen will introduce herself.

I am Mina and I just started a postdoc in the ILLC at the University of Amsterdam where I work in the Epistemology & Philosophy of Science unit, but also in the University-wide research priority area called Human(e) AI. I became a member of the VvL a couple of years ago, on the recommendation of my former classmate Robin from the Master of Logic in Amsterdam. Back then I was living in Bergen, Norway, doing my PhD, and it has been a great way to follow Dutch logic-related news from abroad.

My interest in logic came from the philosophy of mathematics, which again came from some existential questions I had while I was studying mathematics for my bachelor's degree. I was thinking a lot about what the abstract objects I was studying actually were, which led me to take an introductory course in logic and the philosophy of mathematics. I liked how logic was somehow applied while still being very abstract. I also just love puzzles. Fast forward ten years I am now working on multi-agent (modal) logics to model social phenomena. My recent PhD thesis was about using (temporal, hybrid, dynamic and strategy) logics to reason about agents in multi-agent systems who are malicious or act unexpectedly. In my free time I play backgammon, and in 2023 I won the Norwegian national championship in the intermediate bracket. I also like to play music, mostly the piano, but until recently I was also taking pipe organ lessons.

Questions in Logic

In this section, a VvL member explains what drives their research in logic. They illustrate a question (with or without an answer) in logic in an accessible way: this can be a problem they are currently working on, the motivation behind a broader area of research, or an already known result that they simply find interesting. This time Erman Acar (Assistant Professor at University of Amsterdam) will talk about his research.

I am an assistant professor for Explainable AI in Finance at ILLC and Informatics Institute at the UvA. Although I started my research career as a student of logic, through the years, my interest has extended to other fundamental fields such as machine learning, multiagent systems and causality.

My primary fascination with logic and its application to other fields however lived on. Now, my main research interest lies in its application to machine learning, or neurosymbolic AI which is a field that focuses on combining symbolic reasoning with machine learning.

In that context, a particular research question I find very inspiring: Can we use logic in order to guarantee safety and better

outcomes in multi-agent (non-biological) systems that are capable of learning?

This question is important for several reasons, which I will share as personal assumptions: 1) Thanks to the increasing influence of AI systems in daily life, safety of AI systems is an ever growing concern which is not only a computer science problem, but also a societal problem; 2) Safety is inherently a multi-agent (humans included) concept which makes it a complex problem; 3) Safety is closely connected to the very notions of trust and explainability (more specifically, no safety without trust and explainability) 4) The use of formal semantics is necessary to ensure safety, which makes logic an excellent tool to deal with the problem.

A recent preprint that I co-authored with my PhD student, Satchit Chatterji, is our joint initial step towards such an investigation. In that work, we employ an existing safety enforcing mechanism that integrates probabilistic logic programming — a well-known formalism in symbolic AI — into an agent's decision-making process in a reinforcement learning setting. We analyze its positive effect from a game-theoretic perspective such as efficient cooperation and equilibrium selection under various games and settings including uncertainty. Future directions include the relation between the descriptive complexity of shields and the convergence to desired equilibria.