Young KWG Board

News

Young KWG – The first actions

Hello there! In this edition of the Nieuw Archief another update from Young KWG. For those who have not read our previous article in the September issue we will again quickly introduce ourselves. As our name suggests, our main goal is to attract and support young mathematicians in the early stages of their careers by creating a community, and organizing events on topics relevant to them. In this column, we will dive deeper into the events we have (co-)organized and will organize in the coming half year.

A PhD, is that for me?

On the 2nd of February, our board member Mar Curcó-Iranzo (PhD candidate at Utrecht University), together with Sanne Peereboom (PhD candidate at Tilburg University) and Leonard Busch (PhD candidate at University of Amsterdam) organized the third edition of the 'A PhD, is that for me?'—now officially becoming a traditional annual event! This event, meant for master students of (Applied) Mathematics in the Netherlands, is organized to give students a complete picture of what it means to do a PhD in mathematics. In total, more than fifty master students came to Utrecht University for the event, originating from all universities in the Netherlands.

The day started off with a presentation from two speakers: Corine Meerman, working at the Dutch Healthcare Authority, and Cecília Salgado Guimarães da Silva, who is an associate professor at Groningen University. Both speakers were very open about their path from choosing a PhD until where they are now. Judging from all questions that were posed during the talks, the students were very interested in knowing all the ins and outs of both speakers' careers. From deciding where to live with a partner in academia to the history of Fermat's theorem to the benefit of doing a PhD when going into industry—we have discussed it all!

Then, the students split up into two groups to attend the workshop of their choice. In one workshop students learned more about

transferable skills that are gained during a PhD from a career consultant for PhD candidates. The other workshop was a discussion on common hurdles that PhD candidates run into as observed by a PhD coach, such as experiencing impostor syndrome.

Finally, we could have lunch! During the lunch, many PhD candidates from Utrecht University were present, and there were many lively discussions with students on real-life experiences. Due to all these nice conversations with students, it felt like only ten minutes before we needed to continue to the afternoon program.

In the afternoon, the students attended a workshop on what to do and, more importantly, what not to do when applying for a PhD. Although some tips were very much common-sense, apparently many applicants make these same mistakes. Then, after



Cecília Salgado Guimarães da Silva

what had already been a long day of talks, it was time for a more interactive part of the day: the PhD panel discussion. The panel consisted of four PhD candidates at varying stages of their PhD journey, and a strategy consultant who decided not to do a PhD, but to work in industry and get an MBA in New York instead. In about an hour, they shared their experiences on what a PhD is like for them, and why they did or did not choose to do a PhD. We showed the students four vastly different PhD trajectories to emphasize the freedom and the opportunities that you have during a PhD. It was great to hear the open and candid stories of all panelists, which gave the prospective PhD candidates a realistic idea of what to expect.

We think that we can speak for all attendees that it was a great success: many thanks to Mar, Sanne and Leonard for organizing this interesting and inspiring event! We would also like to thank PWN for supporting us in organizing this event. An event such as this is super useful for any student exploring career choices — and makes it clear how important it is to support each other in the mathematical community.

Panel at the Netherlands Mathematical Congress

We will also be organizing a session at the NMC, where we will delve into the transformative potential of generative AI in mathematics research and education. Featuring talks by experts from Stefan Buijsman (TU Delft), Antske Fokkens (VU Amsterdam) and Wouter Kool (ORTEC), we promise the session will take you on a



Katrijn van Deun: Do's and don'ts when applying for a $\ensuremath{\mathsf{PhD}}$



Transferable skills workshop, Chiat Cheong

journey to explore Al's impact on mathematics research, industry mathematics, and teaching.

Before the panel starts, Stefan Buijsman will tell us more about the intricate distinctions between formal and informal proofs, highlighting how mathematicians approach proving theorems very differently from current AI systems. The second panelist, Antske Fokkens, will unravel the mysteries behind large language models, showing their strengths and limitations. Last but not least, Wouter Kool will discuss the trade-offs of using machine learning for optimization, in academia and in practice.

With a panel discussion following the talks, we hope to engage young mathematicians to learn more on how AI can be used in research. We hope to see you all on Tuesday the **2nd of April** at the NMC!

Young KWG day

And then... ** drum roll ** ... we are pleased to announce the long awaited big event of Young KWG: the Young KWG day! We welcome all young mathematicians to join us on the 24th of May at Utrecht University to enjoy a full day of inspiring talks, workshops and many opportunities to network and meet new people. If this did not convince you enough yet, we will have a great keynote speaker confirmed already: Diletta Martinelli—assistant professor at the University of Amsterdam—who will take us on her journey of becoming a researcher. Soon, the registrations will open, so save the date and see you all there!