

A PhD, is that for me?

Summary of the event

General:

The event *A PhD, is that for me?* took place on February 4 at the Minneartgebouw of Utrecht University and was live streamed. With this one-day event for students in both theoretical and applied mathematics.

Number of registrations: 148 in total; 73 in person in Utrecht and 55 via the live stream

Number of participants: 87 in total; 43 in person in Utrecht and 44 via the live stream

Unfortunately, due to the Corona pandemic we received many last-minute cancellations from students with Covid symptoms.

The event was organised by:

- Mia Jukić, MSc - Leiden University (initiator)
- Mar Curcó-Iranzo, MSc - Utrecht University
- Dr. Sanne Willems - Leiden University

Aims:

With this event, we aimed to:

- Showcase the benefits of doing a PhD and different career possibilities after obtaining a PhD degree in Mathematics.
- Help students to make their choice whether they want to apply for a PhD or not.
- Present role models to female students by highlighting the stories and experiences of women in mathematics in the Netherlands.

Programme:

Schedule overview:

10.00 – 10.50	Nelly Litvak, University of Twente
10:50 – 11:00	short break
11.00 – 11.45	Fieke Dekkers, RIVM
12.00 – 13.30	Parallel workshops: Impostor Syndrome (room upstairs) Outcomes of a PhD (plenary room)
13.30 – 14:30	Lunch break
14.30 – 15.15	Do's and don'ts when applying for a PhD
15.15 – 15.30	short break
15.30 – 16.45	PhD speakers
16.45 – 17.00	Closing
17.00 – 18.00	Drinks

Nelly Litvak:

The first speaker was Professor Nelly Litvak from Twente University. In her talk, she first shared how she became a professor in the Netherlands. Using the online tools, she asked multiple questions that students could answer. The students were very interested in participating, and we recorded more than 90 answers.

One of the questions that Prof. Litvak asked was: 'What are your doubts about joining academia,' and the answer that prevailed was 'I am not good enough.' Prof. Litvak then proceeded to elaborate on this issue and she spent the final part of her presentation talking about the feelings that academics might have that they are not 'good enough.' In the end, students could write their questions in the online app and vote for each other questions that they wanted Prof. Litvak to answer. We had an overwhelmingly big number of questions, which shows how the presentation was very engaging and exciting for the students.

Fieke Dekkers

The second speaker of the plenary session was Fieke Dekkers. Fieke obtained her PhD degree in the UK, and currently, she works in the RIVM (National Institute for Public Health and the Environment). She shared her personal experiences with her academic career and elaborated on stepping out of the traditional academic job. She also talked about how her PhD helped her to get her current position at the RIVM, and she showed the various projects she is currently working on at the RIVM.

Parallel workshops

After the plenary session we had a parallel workshop session that consisted of the *Impostor Syndrome Workshop* by Helene Propsma from The Diversity Company, and *The Outcomes of doing a PhD* by Chiat Cheong from PhD Power.

In the *Impostor Syndrome* workshop, Helene explained and defined the impostor syndrome notion and gave tips of how to recognise it (e.g. describing the different ways of manifestation of the syndrome through different personality traits) and advise on how to tackle it (e.g. talking about it with your environment). The workshop was pursued in a very dynamic way where everyone could share their thoughts and experiences in small and big groups. The students were very collaborative and enthusiastic about it.

In the *The Outcomes of doing a PhD* workshop, Chiat initiated a discussion on the non-scientific benefits of doing a PhD. During the one hour of collaborating in smaller groups, the students came up with many examples of beneficial and transferable skills.

Plenary workshop: Do's and don'ts while applying for a PhD

It was organized by Martina Chrilius-Brucker and David Holmes from Leiden University. They have many years of experience reading students' applications for PhD and shared their advice on which important information to write in a cover letter and CV. As a preparation for this workshop, Martina and David each wrote a cover letter for an existing online position, and they analyzed each other's letters in front of the participants.

PhD speakers

We finalized the day with a PhD session, in which we had four PhD students from each mathematical cluster giving a talk on why they chose to do a PhD and their research topics.

This session included talks by:

- Margareta Pagano (Leiden University) from DIAMANT
- Anastasiia Hraivoronska (TU Eindhoven) from NDNS+
- Anna Fokma (Utrecht University) from GQT
- Teodora Pandeva (UvA) from STAR

Each speaker focused on different aspects of a PhD life. Margareta shared the positive experiences she had as a master's student in the algebra group in Leiden, which motivated her to do a PhD. Anna Fokma made a chart on how she applied for multiple PhD positions and the daily activities of her job.

Anastasiia shared her story from the perspective of a student applying from abroad. The session was closed by Teodora Pandeva, who started her PhD a year ago after working in companies and an NGO.

Feedback from participants

We invited the students who registered for the event to participate in two surveys, one before the event and one after the event. The goal of these surveys was twofold. First, we used the results of first survey to detect any misconceptions regarding a PhD which should be addressed during the event. Secondly, the answers from both surveys were compared to evaluate whether events like these are effective for students in mathematics. Students were invited to provide feedback on the event in the second survey to give us an idea on how we can improve an event like this in case it is organised again in the future.

Effect of the event

We are still analysing the data to measure the effect of the event and these results will be presented in a different report.

A news article on Leiden University's website about the event was published here:

<https://www.universiteitleiden.nl/en/news/2022/02/a-phd-something-for-you-math-students-doubt-it-too-often>.

Feedback on event

In general, the event received very positive feedback from the participants. Their comments on the survey stand out the big variety of speakers which made some part of the day useful and/or to taste for each participant, and the space to network with students with similar interests. Hereby we summarize the main criticism.

Points for improvement:

- Better acoustics in the room (and sound quality online if the event is live streamed).
- A less full/long day,
- Some students suggest that the PhD speakers talk even more about their journey to the PhD and daily activities.

Points to keep:

- Variety of speakers and activities (workshops), i.e. the format of the event.
- In person meeting to meet fellow students and the hybrid option for students who couldn't attend in person.
- Having current PhD students giving a talk.
- Having PhD volunteers around to ask questions.

From this feedback we advise any future organising committees to focus on the room acoustics. Furthermore, they could maybe split the group in people who already know they want to pursue a PhD and people who are hesitant about it and have some separate parts for each group to make the day feel less crowded. Another solution would be to include longer breaks.

Quotes

Some quotes from the comments on the survey after the event:

- *[...] it was great and I really appreciate the effort you put into this :)* (ID = 122)
- *thank you very much for organising it, it was so helpful!!* (ID = 117)
- *Thank you so much for organizing it, it was wonderful! :)* (ID = 115)

- *Thank you so much for organising this! I didn't realise the impact that it would have on me (female Bachelor of mathematics student), and how much I needed that impact to change the way I see my future. I always thought that having male professors didn't influence my feelings of doing a PhD or anything like that, because they have never expressed any sexist behaviour or remarks, or made me feel like I couldn't do it. But answering the questionnaire before the event made me realise that I did feel isolated and I didn't think that I could do a PhD. And this event really changed my whole view and made me realise that seeing women actively enter the field, be a part of it, not have to "become men" or whatever, was so joyous. I think that in simple terms, *seeing representation in this field* and hearing stories of women in the field and their feelings, meant a lot more to me than I thought it would. So thank you!!! (ID = 198)*
- *Thank you for the event! I really liked it (ID = 170)*

Finances

This event was sponsored by:

- EWM Netherlands
- Platform Wiskunde Nederland
- The four mathematics clusters in the Netherlands: STAR, DIAMANT, NDNS+, GQT

A short summary of the costs is given in the table below, a detailed overview can be found in the attachment. The original total budget was 8,754.66 euros and the total actual costs were 6,929.48. The main difference between the budgeted expenses and the actual costs results from the decisions to not host a dinner for speakers and volunteers, as this was not possible due to the Covid pandemic, but to give an extra gift instead. Hence, some of the expenses budgeted for the dinner were used for the extra gifts for speakers.

Expenses		Income (sponsors)	
Location	€ 0	STAR	€ 1,100.00
Catering	€ 2,558.84	DIAMANT	€ 1,100.00
Workshops (3)	€ 3,543.44	NDNS+	€ 1,100.00
Appreciation volunteers	€ 662.47	GQT	€ 1,100.00
Travel costs	€ 132.94	Platform Wiskunde Nederland	€ 1,100.00
Materials	€ 34.78	EWM Netherlands	€ 1,432.47
Total	€ 6,932.47	Total	€ 6,932.47