

Report on the conference "Hermann and Friends" from 7 to 9 July 2022 at Utrecht University

Together with Rene, Pat and Fernando I had already been to the first conference on Grete Hermann 2012 in Aberdeen. Our contributions are published in the conference proceedings.

When I was invited to the conference in Utrecht, I had just looked through the estate of Grete Hermann that I had stored and found very important documents that promised to be highly interesting for research. I therefore offered to give a lecture on these finds.

Since, according to my enquiries, it could still be years before the papers could be made available to the public in the responsible archive, I had the relevant pages scanned and the first four pages of the texts in shorthand transcribed. The shorthand pages are obviously transcripts from Grete Hermann's stay at the Heisenberg Institute in Leipzig in 1934. It was important to me that research can deal with the texts in our time and that the shorthand texts will be transcribed with funding from the research institutions.

The interest in my contribution was very great. Guido Bacciagaluppi and Elise Crull immediately planned how they could get the necessary funds. I made it very clear that I was speaking as a representative of the SFCP and that all publications must mention that the SFCP had made the scientific work possible.

My travel expenses and hotel costs were reimbursed from conference funds

Dieter Krohn, 13.09.2022

Texts from Utrecht University's website

Hermann and Friends

Van donderdag 7 juli 2022 12:00 tot zaterdag 9 juli 2022 13:00

A workshop of the international working group on Women in Quantum Physics

Organising committee:

Guido Bacciagaluppi (Utrecht University)

Elise Crull (City University of New York)

Margriet van der Heijden (Technical University of Eindhoven)

Grete Hermann (1901-1984) was Emmy Noether's first PhD student in Göttingen and then turned to philosophy. She worked with Heisenberg and Weizsäcker in Leipzig and produced a series of papers on the foundations of modern physics, including in 1935 a comprehensive

philosophical treatment of quantum mechanics and Bohr's complementarity. She was arguably one of the finest neo-Kantian philosophers and the most important philosopher of quantum mechanics between the wars, and devoted the latter half of her career to reconstructing mathematics and physics education in post-war Germany.

The international working group on Women in Quantum Physics (WiQP) is a subbranch of the APS international working group on the Quantum Century that coordinates activities around the world in the run-up to the centenary of quantum theory. As described in its charter, WiQP "aims to foster international collaborations, rich interdisciplinary scholarship, and heightened awareness/education regarding women from around the world who importantly contributed to quantum physics in the last century, yet whose roles have been largely overlooked. The long term goal is to contribute a robust suite of materials (completed or in progress) highlighting the work of these women as part of the Quantum Century Project (unveiling in 2025)".

WiQP has already organised one session each at the March 2022 APS Meeting in Chicago and the April 2022 APS Meeting in New York. The Utrecht workshop is the first to be organised in Europe and altogether on a larger scale, with 16 international speakers, and organised jointly with the History and Foundations Section of the Netherlands' Physical Society [externe link](#). It will include talks on Tatiana Afanassjewa, Elizabeth Monroe Boggs, Maria Lluïsa Canut, Laura Chalk, Johanna van Leeuwen, Lucy Mensing, Ilse Rosenthal-Schneider, Chien-Shiung Wu, on women in J. A. Wheeler's research group, and a special focus on Grete Hermann.

Two of the workshop's organisers have organised a previous workshop on Hermann in 2012, leading to the 2017 Springer volume *Grete Hermann: Between Physics and Philosophy*, and which significantly contributed to the revival on interest in her work. Hermann is now becoming a source of inspiration for new generations of women physicists (see e.g. the [Grete Hermann Network](#)).

The organisers wish to thank the Freudenthal Institute and the Descartes Centre of Utrecht University, as well as the Lorentzfonds, Stichting Physica and the Pieter Zeemanfonds for generous financial support.

The **Grete Hermann Network** (GHN) is an international network of female researchers in condensed matter physics and neighbouring research areas, involving both junior researchers (for instance senior postdocs, assistant professors, research group leaders) as well as experienced professors. The network is associated to the Cluster of Excellence 'Complexity and Topology in Quantum Matter—ct.qmat' which is funded within the Excellence Strategy of the German federal government. We are a strong research collaboration between Julius Maximilians University Würzburg and Technische Universität Dresden in Germany that started in early 2019.

A central aim of this Cluster, in view of promoting excellent research, is to support the recruitment and careers of female researchers within our field. One of the measures to do so is the establishment of the GHN.

Hermann & Friends Workshop Schedule

(aim for 25-min talks with 20 minutes for discussion)

Thursday, 7 July (Afternoon only) – Buys Ballot building, room 065

12:00 - 13:00 *light lunch (including tea/coffee) available in the room*

13:00 - 13:15 Organizers, Welcoming words

13:15 - 14:00 Guido Bacciagaluppi, “Better than Bohr: Grete Hermann’s Interpretation of Quantum Mechanics”

14:00 - 14:45 Hans Halvorson, “Contexts for Bohr and Hermann”

14:45 - 15:15 *tea/coffee break*

15:15 - 16:00 Mike Cuffaro, “Hermann’s Neo-Kantianism in Context”

16:00 - 16:45 Elise Crull, “Hermann’s Splitting of Truth: A Middle-way between Perspectivalism & Absolutism”

16:45 - 17:15 Dieter Krohn, presentation of Hermann materials from his private collection

Friday, 8 July – Buys Ballot building, room 065

09:15 - 09:45 *tea/coffee available in the room*

09:45 - 10:30 Daniela Helbig, “Border Problems of Science and Philosophy: Grete Hermann and Ilse Rosenthal-Schneider”

10:30 - 11:15 Andrea Reichenberger, “Ilse Rosenthal-Schneider's and Grete Hermann's Neo-Kantian Perspectives on Space, Time and Causality”

11:15 - 12:00 Cristiane Morais Smith, *t.b.a.*

12:00 - 13:30 *catered lunch*

13:30 - 14:15 Miriam Blaauboer, “Hendrika van Leeuwen, Portrait of the First Female Lecturer in Physics at Delft University of Technology”

14:15 - 15:00 Margriet van der Heijden, “Tatiana Afanassjewa and Paul Ehrenfest: A Cosmopolitan Oasis in Provincial Leiden”

15:00 - 15:30 *tea/coffee break*

15:30 - 16:15 Daniela Monaldi, “Laura Chalk and the Stark Effect”

16:15 - 17:00 Patrick Charbonneau, “Elizabeth Monroe (Boggs) and the Birthing of Quantitative Quantum Chemistry”

19:00 *Workshop Dinner – place t.b.a.*

Saturday, 9 July (Morning only) – Drift 25, room 002

09:30 - 10:15 Gernot Muenster, "Lucy Mensing: Forgotten Pioneer of Quantum Mechanics"

10:15 - 11:00 Marta Jordi, "Breaking the Glass Ceiling: Maria Lluïsa Canut between Spanish and American Physics"

11:00 - 11:30 *tea/coffee break*

11:30 - 12:15 Stefano Furlan, "John Wheeler and the Role of Women in the Exploration of the Microcosm"

12:15 - 13:00 Michelle Frank, "Daughter Particle: A Biographical History of Chien-Shiung Wu"