



CIPSH Chair DMRCP
Diversity of Mathematical Research Cultures and Practices
 Chair holder: Prof. Dr. Benedikt Löwe

DMRCP Senior Fellows. C. Antos-Kuby (Konstanz), H. De Cruz (St Louis MO), K. François (Brussels), C. Greiffenhagen (Hong Kong), G. Heinzmann (Nancy), M. Inglis (Loughborough), C. Jami (Paris), B. Larvor (Hatfield), U. Martin (Edinburgh & Oxford), H. Mihaljević (Berlin), E. Müller-Hill (Rostock), R. Ramanujam (Chennai), D. Schlimm (Montréal QC), H. K. Sørensen (Copenhagen), B. Van Kerkhove (Brussels).

DMRCP Newsletter # 4

7 December 2023

News from the DMRCP Fellowship.

Deborah Kant F received the *Förderpreis des Landkreises Konstanz zur Förderung des wissenschaftlichen Nachwuchses* for her doctoral thesis “Independence and Naturalness in Set-theoretic Practice”, defended in 2023.

Benedikt Löwe was elected to serve for four years (2023–2027) as one of the three Vice Presidents of the International Humanities Council (“*Conseil International de la Philosophie et des Sciences Humaines*”, CIPSH) by the CIPSH Executive Committee.

Benedikt Löwe was elected as an ordinary member of the *Akademie der Wissenschaften in Hamburg* (Academy of Sciences and Humanities in Hamburg, AWHH).

Benedikt Löwe was appointed to serve on the Publications Committee and the Early Career Research Committee of the *London Mathematical Society* (LMS). The Publications Committee is charged with delivering the LMS’s scholarly publishing activities. The publication portfolio of the LMS includes the *Proceedings*, *Journal*, *Bulletin*, and *Transactions of the LMS*, and several other journals, as well book series. The Early Career Research Committee is responsible for awarding grants to early career researchers and providing financial support for events aimed at early career researchers.

Tabea Rohr F has been offered a Junior Professorship (with tenure track) for theoretical philosophy in Stuttgart and a Junior Professorship (with tenure track) for logic in *Jena*. She accepted the offer from Jena and will take up the position on 1 April 2024.

Third DMRCP Seminar Meeting.

On 8 September 2023, Stella Moon F, R. Ramanujam SF, and Dirk Schlimm SF presented their research during the third DMRCP Seminar Meeting. Stella Moon explained the concept of *mathematical empathy* developed in her doctoral thesis as a philosophical approach that aims for a better grasp of the motivation of mathematicians.

R. Ramanujam gave a talk entitled “*Discourse in low resource mathematics classrooms*”. In low resource classrooms, the students lack the standard formal language of the textbooks. As a consequence, when those students verbalise their mathematical thoughts, we need to evaluate whether their formulations are mathematically acceptable; Ramanujam proposed formalisability as a criterion.

In the third presentation, Dirk Schlimm summarised his research biography and explained his focus on *the philosophy of mathematical notation*, which includes research on expressions, the manipulation of expressions, the interpretation of expressions, and the verbalisation of expressions with a view towards cultural differences.

European Commission funding application: PPriMe.

DMRCP is planning to submit a proposal for a Marie Curie Doctoral Training Network entitled *PPriMe: Publication Processes in Mathematics* with four network nodes (Brussels, Copenhagen, Hamburg, Loughborough) and several additional partners. If funded, the network will support at least a dozen doctoral students working on cultural aspects of the mathematical publication process and offer regular summer schools to train early career researchers in the skills needed for work in our field. We have collected twelve exciting doctoral projects for this proposal.

The originally planned submission for this year’s deadline (end of November 2023) did not work out and we are aiming for an application for the next deadline, presumably under the aegis of the University of Copenhagen (Mikkel Willum Johansen F). We shall keep you informed about progress.

Activities.

Next DMRCP Seminars. We will have our fourth DMRCP Seminar on Monday 18 December 2023 from 2pm to 3:30pm GMT+1 with Christian Greiffenhagen SF and Tabea Rohr F speaking. We’re looking forward to seeing (some of) you there!

The fifth DMRCP Seminar will take place on Monday 26 February 2024 from 4pm to 6pm GMT+1 with Michael Barany F, Emmylou Haffner F, and Andrea Reichenberger F giving short presentations.

DMRCP members poll. In the next weeks, all DMRCP members will receive the invitation to take part in a poll enquiring about the needs of the members that the DMRCP network can address. The goal is to ensure that the activities of the network be best adapted to the needs of its members.

DMRCP Training Unit at the ESPM Summerschool 2024. The *European Society for Philosophy of Mathematics* (ESPM) is planning to organise regular summer schools; the next school in this series will take place at the Universitt Wien from 9 to 13 September 2024. The main speakers are Jessica Carter, Leon Horsten, and Yacin Hamami. DMRCP offered to organise a training unit entitled *Quantitative and qualitative empirical methods for philosophers of mathematics* that was accepted by the ESPM board. Matthew Inglis SF and Deborah Kant F have volunteered to represent DMRCP and teach this training unit with four hours of lectures and three hours of practical sessions.

Conference on communicating mathematical research. Jordi Fairhurst, José Antonio Pérez-Escobar F and Deniz Sarikaya F organize the event *Bridging the Gap: The importance of communicating mathematical research to lay people and in education* as a satellite conference of the 9ECM. It will take place from 21 to 24 May 2024 at the University of the Balearic Islands, Palma de Mallorca, Spain. Keynote speakers are Paul Ernest, Karen François SF, and Keith Weber F.

The Call for Papers is open until February 29th 2024. More information can be found on the event website at <https://sites.google.com/view/btg-workshop/start>.

Presentation of new Fellows.

Daniel Martins holds an undergraduate degree in mathematics, a Master's degree in computer science, and a doctorate in history of mathematics from the *Universidade Federal do Rio de Janeiro* (UFRJ) and is affiliated with the *Colégio Pedro II*, a federal public school in Brazil that was founded in 1837 and is part of the *Rede Federal de Educação Profissional, Científica e Tecnológica*. Since 2015, he has been teaching in PROFMAT, the *Mestrado Profissional em Matemática em Rede Nacional*. Since 2022, he also holds a postdoctoral position at UFRJ. His interests include the history of differential geometry in France during the 19th century, in particular Darboux and his contributions to the establishment of differential geometry at the *Grandes Écoles*.



Stella Moon is a postdoctoral researcher at the Department of Logic, Institute of Philosophy at the Czech Academy of Sciences. She is interested in contemporary foundations of mathematics, comparing the fundamental conceptual differences found in set theory and type theory. She is developing an *empathy-first* approach to philosophy of mathematics/mathematical practice, which means to look at mathematics from the perspective of the mathematicians, and aim to clarify the fundamental conceptual assumptions and motivational goals of a given mathematical theory. In her postdoctoral project, she is comparing the informal intended interpretations of Martin-Lf type theory and homotopy type theory, from the perspective of the practitioners, clarifying the difference in the concept of identity in the theories. She is also interested in the role empathy can play in mathematical education, especially learning the mathematical concept of natural numbers from the ordinary concept of numbers.



José Antonio Pérez-Escobar is about to finish a two-year postdoc at ENS Paris on the epistemic effects of the mathematization of biology with a Swiss National Science Foundation project (Mathematizing biology: measurement, intuitions, explanations and big data). In 2024, he will be a postdoc at the University of Geneva with his project “Mathematical models and normativity in biology and psychology: descriptions, or rules of description?” from the Swiss National Science Foundation. He has a multidisciplinary background (psychology, neuroscience, philosophy of science/mathematics). His doctoral thesis focused on the epistemology of the mathematization of biology: He has argued that mathematics is not epistemically neutral, that different mathematics can be used in epistemically productive or harmful ways, and that mathematics can promote or discourage a teleological worldview in biology. His main current interest is the intersection between the applicability of mathematics in science and Wittgensteins philosophy of mathematics.



As usual, we mark the Fellows and Senior Fellows of DMRCP with the postnominal letters ‘F’ and ‘SF’, respectively.

If you have any information to be included in the next newsletter, please e-mail Deborah Kant at dmrpc.scientificcoordinator@cipsh.international.