

21st Newsletter – February 2022

Welcome from the Chair

Dear MATH+ Community,

The first newsletter of the year comes heavily loaded with news of upcoming changes and calls!

We are happy to announce that there will be a new **Call for Projects**! You can expect the details of the call to be published in March. See below for more information!

01 March marks the deadline for applications for <u>workshop support</u> and the <u>MATH+ (Distinguished)</u> <u>Visiting Scholars</u> as well as the opening of the second round of the **Call for Applications** for the <u>BMS</u> <u>doctoral program</u>.

The <u>BMS Days 2022</u> will take place on 21-22 February, followed by the <u>BMS Student Conference</u>. The new MATH+ professor at FU, <u>Claudia Schillings</u>, will give one of the talks!

We are also pleased to announce that the call for the <u>Dirichlet Fellowships</u> met with a resounding response, yielding a total of 192 applications. The selection process is still ongoing, but the results will be out soon.

MATH+ awards the <u>Hanna Neumann Fellowships 2022</u> to <u>Ana Djurdjevac</u> (Zuse Institute Berlin) and <u>Katharina Jochemko</u> (KTH Stockholm, Sweden). Please read the inspiring <u>interview they gave MATH+</u> below for more information.

The second round of the <u>online survey for the sociological project</u> **"MATH+ as a Research Object"** will start **on 15 February.** Please support this study and join in!

If you have any news that you wish to share regarding your research, publications, prizes, or interesting guests in the other MATH+ communication formats or the next newsletter, please contact Beate Rogler with details: rogler@mathplus.de.

With best regards,

a Slint

MATH+ Chair

MATH+ News

+ Next Call for Research Projects

MATH+ will shortly be announcing the next call for projects to start in 2023. You'll remember that we already had the second round of the excellence strategy in mind last time when we were looking for projects with the potential of becoming success stories. In December, the DFG announced the time-line for the next round of the excellence strategy: the extension proposal will be due in summer 2024. Thus, the MATH+ Board has started preparations for the extension application in earnest: After the first three project selection rounds, the present Application Areas (AAs) and Emerging Fields (EFs) of MATH+ need to be critically reviewed and where appropriate to be re-focused and re-shaped. The MATH+ Board has sent a list of ideas to the *Scientists in Charge* of the AAs and EFs and will start discussions with them. So, if you think about submitting a project proposal, please get in touch with the *Scientists in Charge* to learn about the state of the discussions and directions of potential change!

We expect to publish the call in March. The MATH+ Central Office will be happy to answer any questions you may have at calls@mathplus.de. **The submission deadline is 17 June 2022**.

+ Further MATH+ Calls for Applications

1) For workshops, colloquia, or other scientific get-togethers

Funds may be used to pay for digital support, e.g., subcontractors. You can apply for up to 5,000 Euros; workshops can take place from this year onwards.

2) Nominations for <u>MATH+ (Distinguished) Visiting Scholars</u> The MATH+ Visiting Scholarship Program aims to enhance the international profile of MATH+ by providing support for longer visits by outstanding scientists and scholars from around the world.

The deadline for both calls is 01 March 2022. Please check in the <u>members area</u> on the MATH+ homepage for more information. We're looking forward to receiving your applications!

+ Second Round for BMS Applications

For admission to the BMS PhD program in October 2022, applications will be accepted in the second round via the BMS online portal from 01 March to 01 April 2022. The <u>application is open</u> to Phase I applicants requiring admission only and Phase II applicants receiving their master's degree by 30 September 2022.

+ BMS Days and BMS Student Conference in February

On 21 and 22 February, BMS applicants from all over the world are invited to participate in the virtual <u>BMS Days</u>. They will be introduced to the graduate school's program and will have the opportunity to get to know potential supervisors. The online format is a mixture of zoom talks and virtual interactive encounters. The mathematical lectures will be given by <u>Claudia Schillings</u> (currently at the University of Mannheim), who will start as the new MATH+ professor at FU Berlin in March, on <u>"Uncertainty Quantification and Inverse Problem"</u> and <u>Thomas Walpuski</u> of HU Berlin on <u>"Invariants of manifolds arising from partial differential equations".</u>

The <u>BMS Days</u> are followed by the <u>BMS Student Conference</u> from 23 to 25 February with invited talks by <u>Chris Wendl</u> (HU Berlin) and <u>Peter Schröder</u> (Caltech).

+ Results of the MATH+/BMS Dirichlet Postdoc Applications

The annual application deadline for the two MATH+/BMS Dirichlet Postdoctoral Fellowships is 01 December. The call met with a resounding response, yielding a total of 192 applications. A ranked shortlist will be compiled from the applications received, and the successful candidates will be presented soon.

+ Second Online Survey of the Sociological Project "MATH+ as a Research Object"

MATH+ strives to provide comprehensive information and opportunities for improvement in the career paths of its young scientists. Thus, the MATH+ partners at the Berlin Social Science Center (WZB) will conduct the second round of an online survey among the MATH+ postdocs as well as the Phase I and Phase II students on **15 February**. The survey is part of the sociological project "MATH+ as a Research Object" that studies MATH+ as an arena for career decisions and academic selection. The project aims to identify existing gender differences in the Cluster of Excellence and provide references for overcoming these differences.

We urge all MATH+ postdocs and BMS students to participate in this critical survey. There will be a raffle among all participants, and three of the stylish MATH+ hoodies can be won.

Read more

+ DMV Annual Meeting 2022 – Call for Minisymposia

The DMV Annual Meeting will be hosted by MATH+ in cooperation with the Department of Mathematics and Computer Science of Freie Universität Berlin and will take place from 12 to 16 September 2022. **The deadline for the Call for Minisymposia is 25 February 2022.**

Read more

+ TES Winter Semester 2021/22 Ends with the SIAM Conference on Imaging Science (IS22)

The Thematic Einstein Semester (TES) in Winter Semester 2021/22 on <u>"Mathematics of Imaging in</u> <u>Real-World Challenges"</u> will end with the <u>SIAM Conference on Imaging Science 2022</u>, which will take place online from 21-25 March 2022.

The Pre-registration deadline is 28 February 2022.

MATH+ People

+ The Following BMS-Student Has Successfully Completed His Doctorate

Alex Christoph Goeßmann (TU Berlin) "Uniform Concentration of Tensor and Neural Networks: An Approach towards Recovery Guarantees"

Congratulations!

+ MATH+ Hanna Neumann Fellowships 2022



K. Jochemko | © private

We are pleased to announce that <u>Ana</u> <u>Djurdjevac</u> (Zuse Institute Berlin) and <u>Katharina</u> <u>Jochemko</u> (KTH Stockholm, Sweden) have been awarded the Hanna Neumann Fellowships 2022.

Congratulations!

Each year, two <u>MATH+ Hanna Neumann Fellow-</u> <u>ships</u> are presented to women postdoctoral researchers in recognition of outstanding work.



A. Djurdjevac | © private

In a frank and animated interview with MATH+, the two BMS alumni talk about their career paths and their great BMS experience, role models, passion for mathematics, and recommendations for young mathematicians. The interview is now available online. It was published in the frame of the "International Day of Women and Girls in Science" on 11 February.

More about the Hanna Neumann Fellowship and the MATH+ Diversity Strategy

MATH+ Events

Preview

- BMS Days and BMS Student Conference
 21-22 February: <u>BMS Days</u>
 23-25 February: <u>BMS Student Conference</u>.
- TES: Tandem Tutorials (TES "Mathematics of Imaging on Real-World Challenges")
 18 February: <u>Karsten Tabelow</u> (WIAS) and <u>Ariane Fillmer</u> (PTB): <u>Neural MRI</u>

+ Upcoming Thematic Einstein Semester (TES)

The upcoming TES <u>"The Mathematics of Complex Social Systems: Past, Present, and Future"</u> aims at unlocking the potential for mathematical modeling and reasoning within the extremely large and diversified fields of study that constitute modern social sciences and the humanities. The TES has a two-fold focus on agent-based models (ABMs) and data-driven methods.

Registration for the TES events is open: <u>https://www.conftool.net/tes-summer-2022/</u>