

Annual Report of the SMS President – Year 2024

1 Summary

The year 2024 has seen a lot of activities of the Swiss Mathematical Society (SMS).

On the side of the regular spring meeting and fall meeting the SMS co-sponsored eight mathematical conferences.

The two scholarly journals of the SMS had a successful year with many excellent publications.

SMS was involved in several outreach activities and it supported early career researchers who were lacking the funds to attend some conferences.

The weekly electronic Newsletter of the SMS provides timely information on mathematical events in Switzerland. Members of the SMS can subscribe to the electronic Newsletter on the SMS website.

On December 31, 2024, the SMS had exactly 492 active members.

We are aware of three SMS members who deceased in 2024: Mr. Fritz Aeschbach, Prof. Dr. Rolf Jeltsch and Prof. Dr. Eduard Zehnder.

2 Journals of the SMS

The SMS owns two scholarly journals. Both are published open access by the EMS Press, an entity of the European Mathematical Society. In the sequel we summarize the reports by their editors in chief:

2.1 Commentarii Mathematici Helvetici (CMH): Based on Report by Eva Bayer, Chief Editor.

	Number of					
2024	submitted	submitted	accepted	accepted	rejected	rejected
	papers	pages	papers	pages	papers	pages
	235	6073	16	532	221	5663

The average time between submission and publication is 23 months. The number of published papers in 2024 (Volume 99) is 15, for a total of 850 printed pages.

The backlog was quite high, hence most papers were rejected. This was done very quickly (in most cases). Before sending out a paper for refereeing, we ask for 2-3 quick overall opinions, and only did go ahead if they are all excellent.

The collaboration within the editorial board and with the EMS Publishing House is excellent.

We welcomed a new editor in 2024, Jeremy Blanc (Neuchatel).

In the name of SMS I like to thank Eva Bayer and the whole editorial board of CMH for their excellent work and dedication.

2.2 Elemente der Mathematik: Based on Report by Norbert Hungerbühler, Chief Editor:

In 2024 appeared the four journal issues 79/1, 79/2, 79/3 and 79/4 with interesting and diverse articles, reviews and problems.

The number of book reviews was not so large, and as a result there did not appear a review in one of the issues.

In 2024 Jörn Steuding had unfortunately to resign for health reasons. As a successor the Board of Trustees elected Martin Widmer, who has been professor at Royal Holloway and will start a professorship at TU Graz. Christoph Thäle, who is in charge of the reviews together with Martin Jakob, would like to leave the editorial team. However, no successor for this task could be found so far.

The section Short Notes introduced in 2016 has proven its worth. Several entertaining mathematical pearls were offered to our readers in the year under review. Since there are hardly any comparable forms in other journals, the Elemente also fill a gap in the market with this offer. The short notes appear in random order, depending on the input, and without box text and CV before the problem section. They are subject to the same strict scientific criteria and the same review process as the usual articles and are also treated as independent articles by the publisher.

The double-blind review introduced in 2020 has been well received by authors and reviewers alike and has proven itself valuable. The authors, in particular, consider this approach to be particularly fair. We are therefore continuing the process. The good cooperation with EMS Press should be emphasized: the cooperation with the team in Berlin works smoothly. The backlog was around 14 months in the year under review.

On the financial side it is great that the Elemente der Mathematik can be acquired by institutions for a very reasonable prize and that the journal is open access through the program 'subscribe to open' of the EMS. Members of SMS can have a personal subscription at an annual rate of CHF 32 and we encourage all members to subscribe to the journal personally.

In the name of SMS I like to thank Norbert Hungerbühler and the whole editorial board of the Elemente for their excellent work and dedication.

3 Mathematical events and conferences supported by the SMS

Throughout the year 2024 there were many mathematical events and conferences which were supported by the SMS:

• The SMS doctoral day was held in Basel on May 3, 2024. It was organized by Alessio Cangini, Philipp Habegger and Julia Schneider and it gathered approx. 40 PhD students from all Swiss universities.

SMS Doctoral Day 2024

- SMS Spring meeting and general assembly was held in Hotel Meielisalp May 14–18, 2024. It was organized by Thomas Blomme (Neuchâtel). SMS Spring Meeting.
- SMS Fall meeting was held in conjunction with the Swiss Numerical Analysis Day in Geneva on September 10, 2024. It was organized by Martin J. Gander, Bart Vandereycken and Gilles Vilmart from the University of Geneva. SMS Fall Meeting.
- Haefliger Memorial Conference, University of Geneva, January 15–17, 2024. It was organized by Anton Alekseev (Geneva) and Tatiana Nagnibeda (Geneva). Haefliger Memorial Conference.
- 123th Swiss-French Workshop in Algebraic Geometry was held in Charmey, Switzerland from January 29 - February 2, 2024 . It was organized in part by Philipp Habegger (Basel) and Julia Schneider (EPFL). Swiss-French Workshop in Algebraic Geometry
- Algebraic Transformation Groups was held on Monte Verità Ascona, Switzerland, May 5-8, 2024. It was organized by Jérémy Blanc, Andriy Regeta and Immanuel van Santen.

Algebraic Transformation Groups

- International Workshop on Code-Based Cryptography ETH Zurich, May 25-26, 2024. General chair was Violetta Weger (TU Munich). Workshop on Code-Based Cryptography
- Birational geometry and dynamics held in Les Diablerets, June 30 July 5. It was organized by Anna Bot (UNIBAS), Fabio Bernasconi (EPFL), Jérémy Blanc (UNI-BAS), Zsolt Patakfalvi (EPFL), Julia Schneider (EPFL) and Egor Yasinsky (Ecole Polytechnique Paris).

Birational geometry and dynamics-

• VT-Swiss Coding Theory and Cryptography Summer School, Riva San Vitale Ticino, July 1–5, 2024. It was organized by Elisa Gorla (Neuchatel), Anna-Lena Horleman (St. Gallen), Felice Manganiello (Clemson), Hiram Lopez (Clemson), Gretchen Matthews(Clemson) and Joachim Rosenthal (Zurich). VT-Swiss Coding Theory and Cryptography Summer School

4 Travel support of the SMS for early career researchers

On a regular basis the SMS evaluates requests for travel support from early career researchers. Using funds from SCNAT and SMS it was possible to support about a dozen early career researchers so that they were able to participate in some scientific event.

5 Mathematical Outreach activities

The SMS continued to sponsor a number of activities aimed at mathematical outreach. In 2024 the SMS supported e.g. an activity aimed at school children called 'Mathe im Advent'. This yearly outreach program started in Germany with support of the Deutsche Mathematikervereinigung and the program started with good success now also in Switzerland. In addition the following concrete outreach projects were supported:

- MATEMATICANDO, a Mathematics Festival held in Locarno, May 23–25, 2024. <u>MATEMATICANDO</u>
- Caravane des Maths, an outreach program of the University of Neuchatel, organized by Bruno Colbois (Neuchatel).

Caravane des Maths

• Les Marmottes, a mathematics camp for girls, les Diablerets, April 8–12, 2024. The event was organized by Elise Raphael (Geneva), Mayra Lirot (Geneva) and Sandie Moody (Geneva).

Les Marmottes

• Matrix x Imaginary, a program for popularization of mathematics, hosted by the SwissMAP Research Station, les Diablerets, Aug. 31–Sep. 4, 2024. Main organizer Elise Raphael (Geneva).

Matrix x Imaginary

6 Matura Awards

Every second year, the SMS gives prizes for good Matura theses in mathematics. In 2024, we attributed two first prizes ex-aequo, and two second prizes ex-aequo. The prizes were handed out by the SMS president at the Kantonsschule Freudenberg in Zurich on September 11, 2024.

The Jury consisted of the SMS committee together with Jérémy Blanc (UniNe), Lorenz Halbeisen (ETHZ), Norbert Hungerbühler (ETHZ), Urs Lang (ETHZ), Benjamin Schlein (UZH) and Alain Valette (UniNe).

Matura Awards 2024

Zürich, May 24, 2025

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Joachim Rosenthal President SMS