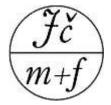
Czech Society for History of Science and Technology (SDVT) and Czech Mathematical Union (JČMF)



cordially invite you to an interdisciplinary workshop



Mathematics and Language A historical Perspective

Call for contributed papers

Dates: Thursday 12 June 2025 (sessions during the day and social dinner)

Friday 13 June 2025

Venue: Faculty of Education, Masaryk University, Poříčí 538/31, Brno CZ, room 37

With its variety of symbolism and specific terminology in its various branches, mathematicians seem to speak different languages. That mathematics in itself is a language is generally accepted, since it has been viewed as the language of nature since the early modern period. Closer to our days, it was a mathematical language that underlined the development of programming languages. Mathematics teaching in the late twentieth century even had the function of teaching proper ways of expressing one's ideas; and the linguistic metaphors go even further: in order to use (apply) mathematics, we may speak of translating the real-life problem into mathematics and after tackling the problem mathematically, we interpret the results. There are many intrinsic connections between mathematics and language, but they form but one link between the two.

In different cultures, from Ancient to Modern times, mathematics was done differently. Studying mathematical practices in the different cultures has long been a topic that inspired philosophers and historians of mathematics. Studying the different practices leads to erosion of the belief that mathematics is universal. Mathematics is done by people who have their specific background, purposes, and ways of expressing themselves. Opening the field of mathematical practice and studying mathematical culture in different land and in different languages is a playground for historians of mathematics: mathematics is local and mathematical results relevant for the particular period of time.

An intriguing connection between mathematics and language arises with the issue of translation and speaking other languages. The language of communication became an issue in the context of internationalism around 1900. Keen to communicate with their colleagues from other countries directly, mathematicians developed symbolic languages, discarding the use of ordinary language in mathematics. At the same period of time, many mathematicians became interested in a language that would be easy to learn, even though it would be a foreign language for everybody. Esperanto was embraced by several mathematicians of the time.

While in the nineteenth century, practising mathematics in a certain language was an issue connected with national revival, stemming from romanticism, in the twentieth century, the language in which mathematics was written also revealed political choices. The number and choice of official languages at an international congress depended also on the countries allowed to participate in the congresses.

There are many other issues that connect the two areas, mathematics and language, in the methods of study, in mutual interactions between mathematics and linguistics, including the problem of translation and transcription of Ancient mathematics and the meta-debates involved in that issue as well as practical considerations of translation. The two-day workshop seeks to bring together scholars who would like to present their work in this perspective.

Invited speakers:

Frédéric Metin (CNRS and INSPÉ Bourgogne, France)

Esperanto or Ido? Mathematicians in the International Language controversies, 1900-1914

Elías Fuentes Guillén (CAS Prague, Czechia)

Old terms within new mathematical practices at the turn of the 19th century

We invite scholars to send abstracts of their proposed talks (between 200 and 500 words) to hdurnova@ped.muni.cz by Thursday 8 May 2025. Notification of acceptance by 12 May 2025.

Topics include, but are not limited to the history of:

- Mathematics as language.
- Mathematics practised in different languages.
- Geometry in Engineering, Nomography and other outdated disciplines ,
- o Translating mathematics.

Selected papers may be published in a special issue of the journal *History of Sciences and Technology* https://dvt-journal.cz/en/ (ISSN 0300-4414 print, 2788-3485 online).

Conference fee: EUR 30 or CZK 600, payable on site or through bank transfer.

Contact e-mail: hdurnova@ped.muni.cz

Looking forward to seeing you in Brno!

Helena Durnová (Brno) & Jan Kotůlek (Ostrava)

This workshop is a part of the series *Mathematics and Society*,

https://math-and-society.webnode.page/

