Acta Baltica Historiae et Philosophiae Scientiarum
Vol. 12, No. 2 (Autumn 2024)
DOI: 10.11590/abhps.2024.2.08

NEWS AND EVENTS

The XXXI Conference of the Baltic Association of the History and Philosophy of Science

The XXXI Conference of the Baltic Association of the History and Philosophy of Science (BAHPS) was held on 13–16 June 2024 on the premises of the University of Tartu, Estonia. The conference titled 'Scientific Instruments in History and Philosophy of Science, Technology and Medicine' celebrated the bicentennial anniversary of the completion and acquisition of the large astronomical instrument. The telescope, called the Great Dorpat Refractor, was made by Joseph Fraunhofer and until now remains housed in the same place—the Old Observatory of the Tartu University. The famous Friedrich Georg Struve and his colleagues used this majestic instrument to carry out observations and study double stars. A representative of the German research organisation Fraunhofer Society greeted the conference participants, who were also given the opportunity to visit the Observatory and its museum, which houses the Great Refractor and other historical scientific instruments. The Tartu observatory is also interesting for the history of science, because inside the building one can see the mark of the local point that was used to measure the Struve Geodetic Arc. The Arc was inscribed on the UNESCO World Heritage List in 2005.

In his opening address, President of the Association Prof. Peeter Müürsepp presented the history and consistency of the Association's conferences on the history and philosophy of science. The BAHPS was established in 1958 as the union of science historians from Estonia, Latvia, and Lithuania. Since 2013, the academic journal *Acta Baltica Historiae et Philosophiae Scientiarum*, published by the BAHPS in collaboration with the Tallinn University of Technology, has become the established platform for the Baltic region, publishing the works of researchers working in the fields of the history and philosophy of science. Participants from more than ten countries attended this year's event. From their inception in the middle of the twentieth century, these international conferences were usually organised every other year in one of the participating countries. This tradition was interrupted only twice—once due to the unrest related to breaking free from the Soviet Union and again during the COVID-19 pandemic. Each conference has seen growth in international scope, which reflects the event's stability.

Tartu Old Observatory. Photo by Veronika Girininkaitė.

Two plenary speakers addressed the history of scientific buildings and instruments and the evolution of science methodology. Prof. Dr. (Em.) Gudrun Wolfschmidt from Hamburg University, who has actively researched historical scientific instruments and observatories and is the author of numerous books on various topics in the history of science, a member of several scientific societies, the founder of the online network Portal to the Heritage of Astronomy (web.astronomicalheritage.net), presented the paper 'Cultural Heritage of Observatories and Instruments in the Baltics.' In her illuminating talk, Prof. Wolfschmidt introduced the history and structure of the earliest astronomical observatories built in the Baltic Sea region and the biography and accomplishments of the great inventor and instrument maker Joseph Fraunhofer (1787–1826). The speaker emphasised the importance of Fraunhofer's ideas and technological innovations and his influence on the art of producing scientific instruments.

Prof. Dr. James Ladyman from Bristol University delivered the second plenary speech. He is the author of four books in various fields of philosophy, among which *How to Understand Science Philosophy* (2002) is closest to the theme of this conference. In his paper 'Scientific Empiricism: The Philosophical Significance of Instruments in the Chemical Revolution,' Prof. Ladyman demonstrated the interdependence between the advantage of technology, on the one hand, and the expanding possibilities of methodology and theoretical thought on the other, discussing the history of chemistry becoming a genuinely scientific discipline

in the Early Modern period. This was made possible only due to the perfection of accurate measurements and precise instruments—the pneumatic trough and other inventions—and upon meeting the knowledge realms of chemistry and physics. During the discussion, the speaker also mentioned the still often overlooked contribution of women scientists or the wives of famous scientists to scientific progress and the need to reconsider the Kuhnian concept of scientific revolution.

In accordance with the conference's central theme, several papers examined closely scientific instruments as artefacts and material objects of heritage. The conference participants discussed ways of exploring historic scientific instruments as material objects (J. Desborough) and explained the obstacles that delayed astronomical knowledge progress (L. Leppik). A presentation about the collection of historical instruments of Vilnius Observatory also included updates on the online visibility of the letters and documents related to the history of this observatory (V. Girininkaitė). A paper about the great traveller and natural history researcher Alexander von Humboldt entailed an announcement about a still-growing but already rich online resource, presenting documentation about his travels (edition.humboldt.de) (F. Schnee).

Presenters from Norway (G. R. Sletvold and B. V. Johansen) shared a successful case of science education for schoolchildren and the genuine demand for it through an example of regular school education organised in the preserved 1833 building of the Oslo Historical Observatory. They observed the positive impact of such lessons on the choices and attitudes of the participants. Another paper from Norway discussed the possibilities and importance of using facsimiles of historical maps and documents when teaching about the nature of science and the history of natural sciences (A. Vaalund, A. Braathen, and I. Eikeland). Yet another presentation stressed the importance of preserving the original scientific instruments and artefacts historically used in laboratories and former education methodologies (R. Wittje).

Many of the papers were dedicated to the history of medicine, both the evolution of the discipline and the practices used. The conference participants learned about the first clinical practices, operating in Vilnius at the beginning of the 19th century (E. Sakalauskaitė-Juodeikienė), and the situation of psychology studies and research in Lithuania under the Soviet regime, when experimental psychology was replaced by pedagogical psychology (I. Rasickaitė). Other contributions discussed the ways of enhancing education in history of medicine by reading memoires of renowned medics (A. Žalnora), a particular case in

Conference participants. Photo by Mariann Raisma.

Latvian history of surgery (A. Žabicka), unfulfilled anthropometric initiatives in Latvia (I. Lībiete), and the invention of specific medical instruments (M. Pozemkovska).

There were also papers on the history of mathematics (P. Müürsepp) and methods of mathematics education (A. Moktefi and M. Muntersbjorn), the applicability of mathematical models in science (J. A. Pérez-Escobar), and paleoastronomy (J. S. Cordova). Presenters from Finland and Lithuania (M. Kallinen, H. Salmi, and L. Šmigelskas) spoke about the history and current state of preservation of specific memorial sites: the points of the Struve Geodetic Arc. L. Le Douarin's paper on geodetic arc measurements as a phenomenon of colonial power sparked lively discussions. Another discussed topic was the relative "invisibility" of the heritage of science history because its value is not as easily explained as, for example, the value of beautiful art collections or architectural sites.

Several papers addressed regional ecology and the history of scientific institutions. A. Ričkienė and I. Jukonienė presented the history and importance of peatlands for the ecosystem and the current challenges in peatland preservation in Lithuania. There were papers exploring the proceedings of such institutions as

the University of Tartu under German and Soviet occupations (E. Tammiksaar), the Museum of Geology of Vilnius University (E. Rudnickaitė), the Southern Research Institute of Marine Fisheries and Oceanography (H. Doronina and H. Zvonkova), Rīga Polytechnikum (A. Zigmunde), and the University of Latvia Observatory (I. Vilks).

Young researchers (K. Jõgi and E. J. Oras) presented their findings from applying a machine-driven discourse analysis of publications from selected years, which helped them draw some conclusions about the society's prejudices and beliefs in specific periods.

Unfortunately, not all participants who sent applications to this conference could participate in the meeting. The three-day conference featured 43 educational and significant papers covering a wide range of topics from different fields of knowledge: the exact and natural sciences, pure, theoretical and applied sciences, such as pedagogics, science education, assembling specialised online resources, the practice of curation or applying discourse analysis to elicit attitudes of the history of the society. At the conference's closing ceremony, the Association's presidency was transferred to Latvian colleagues, and the next meeting is expected to take place in 2026 in Rīga.

Dr **Veronika Girininkaitė**
Vilnius University Library