

International recognition of Jost Bürgi (1552 – 1632)

Jost Schmid-Lanter, Zentralbibliothek Zürich

One of the historically most interesting 'triple constellations' was the collaboration of the German Johannes Kepler, the Dane Tycho Brahe and the Swiss Jost Bürgi around 1600 in Prague at the court of Emperor Rudolf II. Kepler could not quantitatively explain the measured data of planetary motions around the Sun provided by Brahe and Bürgi using the approach of circular orbital curves, which could be due to measurement inaccuracies as well as to his theoretical approach. When the discrepancy could not be resolved even with Bürgi's more accurate time and angle measuring instruments, Kepler replaced the circular orbits first with ovals, then with elliptical orbits, and now found much better agreement between theory and experiment. The new approach enabled him to derive further laws of planetary motion, which entered the history of modern science as Kepler's three laws, and whose date of formulation is considered by many to be the beginning of modern astronomy.

The Jost Bürgi Initiative in Lichtensteig in the canton of St. Gallen, Bürgi's birthplace, has been endeavoring for some years to give Bürgi's person the historical appreciation to which he is entitled by organizing an annual international symposium in which the Swiss Physical Society participates from the beginning in 2015. The symposia were and are followed closely also in the USA.

The clocks and mechanical drives of celestial globes built by Bürgi were far ahead of their time due to technical innovations such as improved regularity of tooth pitch and shape and mastered assembly techniques of axle bearing and balancing. His instruments allowed to reliably measure time and arc seconds, one strong reason to consider Bürgi as an early grand master of the art of watchmaking, the synonym for Swiss excellence.

New Jost Bürgi Research Library in New York

Probably the most important private library on the art of watchmaking was donated to the Horological Society of New York (HSNY) by Fortunat Mueller-Maerki on the occasion of last year's symposium of the National Association of Watch and Clock Collectors on 20-21 October 2022 in New York and made publicly accessible.

Fortunat Mueller-Maerki emigrated with his family to the USA at a young age, where he soon became a partner for the international executive search firm Egon Zehnder and set up the office in New York. As an "exiled Swiss", however, he returned to our country again and again, especially to the International Jost Bürgi Symposium. The lasting impression of this event and the contacts it created were one of the rea-



Peter Fux (left) and Jost Schmid-Lanter unveiling the entrance to the Jost Bürgi Research Library.

sons why Mueller-Maerki christened his collection the "Jost Bürgi Research Library". The library contains some 25,000 cataloged items, making it one of the largest and most important specialized libraries on the art of watchmaking in the world. An already online catalog is currently being converted into an exchangeable format by the helpful and academic library staff of HSNY: bhm search (http://www.hsn161.com/BHM/bhm1-allusers/bhm_entry.php).

The Watch Library Reading Room and collections are located on the 5th floor of the General Society of Mechanics and Tradesmen building, 20 West 44th Street, New York City. The 100+ years old building contains (in the middle of Midtown Manhattan) an impressive multi-story auditorium framed by several galleries for exhibitions and other General Society library collections. The core team of the Jost Bürgi Initiative was invited to the ceremonial naming of the "Jost Bürgi Research Library". The team delegated Dr. Peter Fux and Dr. Jost Schmid-Lanter to this event to present Jost Bürgi and his work and to give an outlook on the upcoming large special exhibition (autumn 2023) on Bürgi in the Historical and Ethnological Museum St. Gallen.

During the numerous meetings, important relationships were established and information was gathered: For example, that the work of the recently deceased graphic artist John Redfern can now be studied collectively. Due to copyright regulations, his ingeniously animated explanatory videos on watchmaking could only be seen in individual museums, and his person was previously known to only a few: <https://redfernanimation.com/animations/>

The US-American Mark Frank recently had an "Astro-skeleton" clock with 64 (!) complications built at his own expense and for private purposes. Apparently he also used Bürgi innovations for this purpose: <http://www.my-time-machines.net/>