

Euler, Leonhard

Correspondence with Th. Abbt, B. Brauser, J. P. Eberhard, F. Ch. Jetze, W. J. G. Karsten, Ch. A. Körber, Ch. G. Kratzenstein, J. G. Krüger, J. J. Lange, J. A. Osiander, J. E. Philippi, J. H. Schulze, J. A. von Segner und J. W. von Segner. Edited by Andreas Kleinert and Thomas Steiner. With the collaboration of Gisela Kleinert and Martin Mattmüller. (Briefwechsel von Th. Abbt, B. Brauser, J. P. Eberhard, F. Ch. Jetze, W. J. G. Karsten, Ch. A. Körber, Ch. G. Kratzenstein, J. G. Krüger, J. J. Lange, J. A. Osiander, J. E. Philippi, J. H. Schulze, J. A. von Segner und J. W. von Segner.) (German) [Zbl 1412.01036](#)
Leonhardi Euleri Opera Omnia. Series Quarta A: Commercium Epistolicum 8. Cham: Birkhäuser (ISBN 978-3-319-75942-5/hbk). xiv, 713 p. (2018).

This volume contains 236 letters that Euler exchanged (during his stay at Berlin between 1741 and 1766) with scientists mainly working at the University of Halle. The letters are, with very few exceptions, written in German, mathematical parts are often written in Latin. Almost all of the letters are addressed to Euler. In particular, this is true for Euler's extensive correspondence with Johann Andreas Segner, which consists of 154 letters from Segner to Euler. The letters mainly deal with social and personal topics.

The strangest among Euler's correspondents in this volume surely is Johann Ernst Philippi, a professor of rhetoric at Halle between 1731 and 1734, who has done everything in his powers to deserve being forgotten. One of the low points in his career was the publication of sardonical poems concerning Anton Wilhelm Amo. Amo was enslaved as a child, deported to Amsterdam and then given as a present to the Duke of Brunswick-Lüneburg. He studied philosophy and law at Halle and received his PhD in Wittenberg in 1734. In 1747, he proposed to a woman from Jena, which Philippi used as an excuse for his slurs.

J. A. Segner was the successor of Christian Wolff at Halle. Segner and Euler often discussed geometric problems, but every time Euler asked him to look at a few number theoretic propositions of Fermat (Euler does so for the first time in his letter from Nov. 11, 1742), Segner usually answered with a litany of excuses. When Euler showed him how to find "Binet's formula" for the "Fibonacci" sequence by using the partial fraction decomposition of $\frac{1}{1-x-xx}$, Segner (Jan. 8, 1743) admitted that he could not solve the corresponding problem for recurrent sequences of order 3 and 4 because he did not know a method of finding all divisors of all equations. On May 2, 1757, Segner attempted a proof of Fermat's Last Theorem; when Euler pointed out his mistake he answered by declaring that he couldn't think properly about the problem since he could not do anything but think about the great deeds of King Frederick the Great (whose army had just won the battle of Prague during the Seven Years War).

The comments provide references to other letters or Euler's articles and identify the persons showing up in the letters, but occasionally are very economical. In a letter from Segner to Euler on p. 323, for example, Segner writes about "40 shoes in radio" which sounds strange to a modern reader and would have deserved a short comment. In fact, a shoe is a Parisian shoe, i.e., a *piéd du roi*, which is slightly larger than 30 cm; moreover, in radio simply means "in the radius". The unit "shoes in radio" was actually used for giving the size of quadrants and sextants.

In conclusion, the editors, with the help of Gisela Kleinert, Martin Mattmüller and others, have presented another impeccable volume of the fourth series of Euler's 'Opera omnia', which allows not only historians to take a look behind the scenes of the academic world of the 18th century.

Reviewer: [Franz Lemmermeyer](#) ([Jagstzell](#))

MSC:

- [01A75](#) Collected or selected works
- [01A50](#) Mathematics in the 18th century
- [01A70](#) Biographies, obituaries, personalia, bibliographies

Biographic references:

[Abbt, Thomas](#); [Brauser, Benjamin](#); [Eberhard, Johann Peter](#); [Jetze, Franz Christoph](#); [Karsten, Wenzeslaus](#)

Johann Gustav; Körber, Christian Albrecht; Kratzenstein, Christian Gottlieb; Krüger, Johann Gottlob;
Lange, Johann Joachim; Osiander, Johann Adam; Philippi, Johann Ernst; Schulze, Johann Heinrich; von
Segner, Johann Andreas; von Segner, Johann Wilhelm