

## Euler, Leonhard

**Correspondence of Leonhard Euler with Christian Goldbach. Part I. Original German and Latin texts. With an English introduction. Edited by Martin Mattmüller and Franz Lemmermeyer. (Leonhardi Euleri commercium epistolicum cum Christiano Goldbach. Pars I.)** (English, Latin, German) [\[Zbl 1361.01008\]](#)  
Leonhardi Euleri Opera Omnia. Series Quarta A: Commercium Epistolicum 4, pt. 1. Basel: Birkhäuser/Springer (ISBN 978-3-0348-0892-7/hbk; 978-3-0348-0879-8/set). xii, 1-580 (2015).

The present book in the edition of Leonhard Euler's oeuvre is concerned with the correspondence of Euler with Christian Goldbach. It comprises two volumes; for the second one, see [\[Zbl 1361.01009\]](#).

The present volume starts with an interesting preface giving an overview of the publication history starting in 1910 when it was decided to include some of Euler's correspondence in an edition of his 'Opera omnia'. However, the hope to see Euler's correspondence in print could not be satisfied then. Between 1959 and 1976 another attempt was made by the Leningrad section of the Soviet Academy of Sciences and the Academy of Sciences of the German Democratic Republic. In that project, four major volumes of Euler's letters were published. The Euler-Goldbach correspondence appeared in Berlin in 1965 as a part of this ambitious project. Thereupon, the Swiss Euler Committee decided in 1967 to start Series IVA for the correspondence, but Goldbach was not given priority since there was already a modern edition. It was only in 2001 when the decision was made to plan a new edition of the Euler-Goldbach correspondence led by Günther Frei and Martin Mattmüller. When Frei had to abandon the project due to serious health problems Franz Lemmermeyer was chosen to replace him. Together with other specialists Lemmermeyer and Mattmüller have presented Part I and II of Series IVA, Vol. IV.

The present volume starts with an introduction concerning the historical and biographical setting. A short biography of Goldbach is followed by an account of the relationship between Euler and Goldbach. A chronology and some statistics on the correspondence of both men are given and the main subjects of the correspondence are carved out. The meta-theme is number theory, of course, but also subjects of analysis like Riccati's differential equation, elliptic integrals, divergent series, geometry, combinatorics, as well as subjects in natural science are treated in the letters. Chapter 3 includes a description of the manuscript sources, remarks on prior editions, and a clear definition of the editorial principles. The translation of the letters which are presented in Part II was done into modern English aiming at a wider readership. In the present Part I the transcribed original texts are printed, mainly in out-of-date German or Latin. I have commented on the English transcriptions in Part II.

The present volume is a pearl in the edition of Euler's correspondence and a must-read for historians of mathematics particularly interested in the history of number theory.

Reviewer: [Thomas Sonar \(Braunschweig\)](#)

### MSC:

- [01A75](#) Collected or selected works
- [01A50](#) Mathematics in the 18th century
- [01A70](#) Biographies, obituaries, personalia, bibliographies
- [11-03](#) Historical (number theory)

Cited in **1** Review

### Keywords:

[Euler-Goldbach correspondence](#); [history of number theory](#); [transcription of original letters](#)

### Biographic references:

[Euler, Leonhard](#); [Goldbach, Christian](#)