Euler, Leonhard

Correspondence of Leonhard Euler with Christian Goldbach. Part II. Edited by Martin Mattmüller and Franz Lemmermeyer. (Leonhardi Euleri commercium epistolicum cum Christiano Goldbach. Pars II.) (English, Latin, German) ⟨Zbl 1361.01009⟩
Leonhardi Euleri Opera Omnia. Series Quarta A: Commercium Epistolicum 4, pt. 2. Basel: Birkhäuser/Springer (ISBN 978-3-0348-0880-4/hbk; 978-3-0348-0879-8/set). 583-1248 (2015).

The present volume is the second part of Lemmermeyer and Mattmüller's edition of the correspondence between Euler and Goldbach. For the content of Part I, see [Zbl 1361.01008].

Part II includes many true gems in the history of number theory. Already in the first letter to Euler Fermat's assertion that all numbers of the form $2^{2^{x-1}} + 1$ being prime numbers is discussed. Euler's first precaution concerning this assertion led him to read more by Fermat and to dive even deeper into number theory.

Letters 51 and 52 are the ones in which the famous Goldbach conjecture appeared for the first time. Personal remarks in the letters give an insight into more private aspects of life in these days and sometimes are touching.

This edition of the Euler-Goldbach correspondence published in two volumes will soon be the indispensable reference. It is a pearl in the literature concerning history of mathematics and history of number theory in particular.

Reviewer: Thomas Sonar (Braunschweig)

MSC:

01A75	Collected or selected works	Cited in **1** Review
01A50	Mathematics in the 18th century	
01A70	Biographies, obituaries, personalia, bibliographies	
11-03	Historical (number theory)	

Keywords:

Euler-Goldbach correspondence; history of number theory; English translations

Biographic references:

Euler, Leonhard; Goldbach, Christian