

**Bertolini, Massimo**

**Regulators,  $L$ -functions and rational points.** (English) Zbl 1282.14042  
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This is an expository paper which introduces the reader to a series of papers by the author and H. Darmon on Kato's Euler system and rational points on elliptic curves. He points out a remarkable parallelism between the setting of Dirichlet  $L$ -functions and the setting of the  $L$ -functions for elliptic curves. Among other things he focuses on the arithmetic nature of the special values of these  $L$ -functions and describes their connections with the Birch and Swinnerton-Dyer conjecture.

Reviewer: [Fumio Hazama \(Hatoyama\)](#)

**MSC:**

- [14G10](#) Zeta functions and related questions in algebraic geometry (e.g., Birch-Swinnerton-Dyer conjecture)
- [11G40](#)  $L$ -functions of varieties over global fields; Birch-Swinnerton-Dyer conjecture
- [11G05](#) Elliptic curves over global fields

**Keywords:**

$L$ -functions; elliptic curves; Euler systems