

SECOND PUBLIC EXAMINATION

Honour School of Mathematical Sciences: Paper O1

HISTORY OF MATHEMATICS

Reading Course Hilary Term 2022:

Circulation of Differential Calculus between France and Britain, c. 1800-1820

Candidates should write an essay of 3000 words using the following as a guide.

Up to 10% variation in length is permissible.

The bibliography is not included in the word count.

Essay to be submitted by 12 noon on Monday 21st March 2022 (HT, week 10)

Circulation of Differential Calculus between France and Britain, c. 1800-1820

Compare and contrast some aspects of the circulation of differential calculus in early 19th-century Britain, with a focus on Playfair's 1808 review of *Mécanique Céleste*, the *New Series of the Mathematical Repository*, and the 1816 English translation of Lacroix's *Traité élémentaire de calcul différentiel et de calcul intégral*. It is *suggested* that your essay focus on three or four of the following aspects of these works. This list is offered for guidance only and should not inhibit your own ideas.

- (1) The motivation for the authors of these works and the context within which the works appeared.
- (2) The authors' conceptualisations of the differential calculus, including the terminologies and notations used.
- (3) The technical content of the works.
- (4) The manner in which the various works were published and received.
- (5) The impact the texts had on each other, or on later mathematicians and students of mathematics.

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