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Titolo	Lacroix and the calculus [[electronic resource] /] / Joao Caramalho Domingues
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ISBN	1-281-49169-1 9786611491697 3-7643-8638-X
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Descrizione fisica	1 online resource (480 p.)
Collana	Science networks historical studies ; ; v. 35
Disciplina	515.09
Soggetti	Calculus - History
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references (p. [427]-459) and index.
Nota di contenuto	A short biography of Silvestre-François Lacroix -- An overview of Lacroix's <i>Traité</i> -- The principles of the calculus -- Analytic and differential geometry -- Approximate integration and conceptions of the integral -- Types of solutions of differential equations -- Aspects of differences and series -- The <i>Traité élémentaire</i> -- The second edition of Lacroix's <i>Traité</i> -- Final remarks.
Sommario/riassunto	Silvestre François Lacroix (Paris, 1765 - <i>ibid.</i> , 1843) was a most influential mathematical book author. His most famous work is the three-volume <i>Traité du calcul différentiel et du calcul intégral</i> (1797-1800; 2nd ed. 1810-1819) – an encyclopedic appraisal of 18th-century calculus which remained the standard reference on the subject through much of the 19th century, in spite of Cauchy's reform of the subject in the 1820's. Lacroix and the Calculus is the first major study of Lacroix's large <i>Traité</i> . It uses the unique and massive bibliography given by Lacroix to explore late 18th-century calculus, and the way it is reflected in Lacroix's account. Several particular aspects are addressed in detail, including: the foundations of differential calculus, analytic and differential geometry, conceptions of the integral, and types of solutions of differential equations (singular/complete/general integrals, geometrical interpretations, and generality of arbitrary functions). Lacroix's large <i>Traité</i> ... was adapted for teaching into a shorter, textbook version – the <i>Traité élémentaire de calcul différentiel et de</i>

calcul intégral (1802; several later editions). This adaptation is also analysed. Lacroix and the Calculus should appeal to historians and mathematicians interested in the history of the calculus (and especially in the background to Cauchy and Bolzano) and in its teaching in the late 18th and early 19th centuries.
