

ÉMILIE DU CHÂTELET

MATHSJAM VI

Nicholas Jackson

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SOPHIA AND EMILIE



Sofya Vasilyevna Kovalevskaya



Emilie Sophia Claire Jackson

ADA AND ÉMILIE



Augusta Ada King
Countess of Lovelace
(1815–1852)



Gabrielle Émilie le Tonnelier de Breteuil
Marquise du Châtelet
(1706–1749)

- Noblewomen
- Parent who encouraged study of mathematics and science
- Long-running professional collaboration with eminent colleague
- Wrote influential annotated translations of important mathematical texts.
- Entertainingly colourful and scandalous private lives
- Untimely deaths

GABRIELLE ÉMILIE LE TONNELIER DE BRETEUIL



- Daughter of Louis Nicolas le Tonnelier de Breteuil, baron and officer of the court of Louis XIV.
- Interested in science from an early age. Encouraged by her father, discouraged by her disapproving mother.
- Keen rider, fencer, dancer, actress, singer, harpsichordist and accomplished gambler.
- Taught by Bernard de Fontanelle, Moreau de Maupertuis and Alexis Clairaut.
- Challenged Jacques de Brun, chief of the Royal Household Guard, to a duel. Fought him to a respectable draw.
- Married Florent-Claude, Marquis du Châtelet-Lomont, with whom she has three children.

ÉMILIE AND VOLTAIRE



François-Marie Arouet (Voltaire)
(1694–1778)

- 1733: Meets Voltaire and begins long-running academic collaboration and love affair.
- Renovates family mansion at Cirey-sur-Blaise and sets it up as a research centre and library (~ 21 000 books).
- Lived there with him (and sometimes Florent-Claude) for most of the rest of her life.



- Affair with Jean-François de Saint-Lambert (1716–1803); dies after giving birth to their daughter Stanislas-Adélaïde, aged 42.

SCIENTIFIC WORK AND OTHER RESEARCH



DISSERTATION SUR LA NATURE ET LA PROPAGATION DU FEU.

*Ignis convexi vis, & sine pondere cœli
Emicuit, fumâque locum sibi legit in arce.
Ovid.*

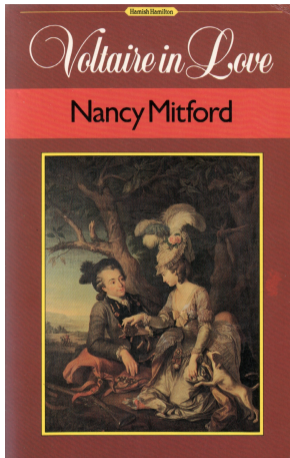


A PARIS,
Chez PRAULT, Fils, Quai de Conti, vis-à-vis
la descente du Pont-Neuf, à la Charité.

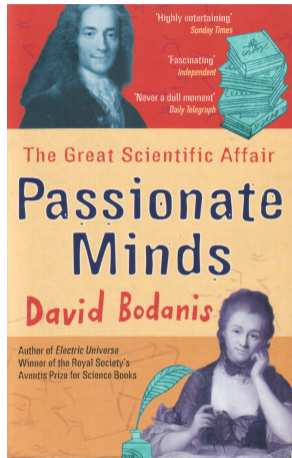
M. DCC. XLIV.

Avec Approbation & Privilège du Roi.

- *Dissertation sur la Nature et la Propagation du Feu* (1737)
- *Éléments de la Philosophie de Newton* (1738)
- *Institutions de Physique* (1740)
- *Réponse de Madame la Marquise du Chastelet, a la lettre de M de Mairan* (1741)
- Conservation of energy
- Kinetic energy $\propto \frac{1}{2}mv^2$
- Translation and commentary on Newton's *Principia Mathematica* (1749)
- *Discours sur le Bonheur*
- Critical analysis of the Bible
- Invention of financial derivatives
- Supporter of women's education



Nancy Mitford
Voltaire in Love



David Bodanis
Passionate Minds