

Maria Gaetana Agnesi (1718-1799)

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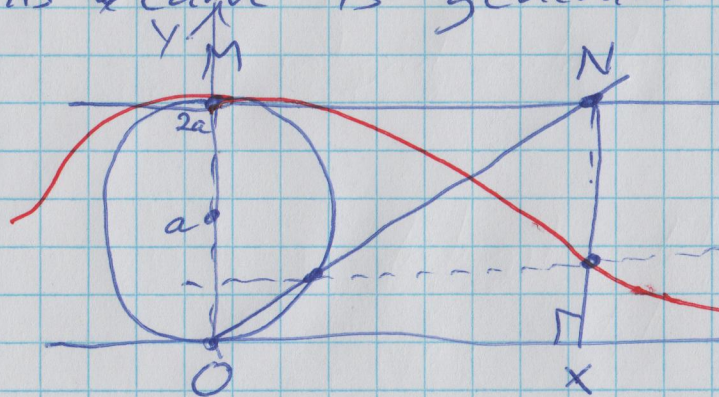
- from a wealthy family and got a very good education once she was recognized as a prodigy
 - by 11 she was fluent in Italian, French, Latin, Greek, Spanish, and Hebrew
- her family, especially her father, liked to show her off, and she became semi-reclusive, devoting her time to studying mathematics and educating her younger siblings (she was the ~~youngest~~ oldest of 21, her having remarried twice)
- wrote the first textbook anywhere on both differential and integral calculus (Instituzioni analitiche ad uso della gioventù italiana) [1748]
 - later translated into French and English and was widely read in Europe.
- she was appointed a professor of mathematics at the Univ. of Bologna in 1750 by Pope Benedict XIV.
(first woman to hold a professorship in mathematics)

However, she fell ill around then and never actually took up the appointment. Her father died in 1752, after which she became a nun and devoted the rest of her life to caring for the sick and the poor.

(2)

Best known today for having studied the "versiera" (also known in English as the "witch of Agnesi") which appeared in her textbook.

This curve is generated by taking a circle and sliding a vertical line NX horizontally from the poles looking at the point on the vertical line that at the same level as the intersection of the circle with the line joining the south pole O to N .



$$y = \frac{2a^3}{x^2 + 4a^2}$$

A scaled of this curve is the density for the Cauchy distribution. The curve is a derivative of ^{scaled} ~~an~~ arctangent function, etc.

(3)

Next: a series of French mathematicians whose surnames begin with L

A quick bit of background on the French Revolution and its aftermath:

French Revolution began in 1789 with the abolition of the monarchy by the French Parliament.

- proclamation of the Republic in 1792

- French Revolutionary Wars (1792-1802) pitting France against the rest of Europe

- Reign of Terror (1793-1794) & execution of Louis XVI in 1793

Ended in 1799 when Napoleon became "First Consul" after a coup.

Napoleon declared himself Emperor of the French in 1804 and proceeded to conquer much of Europe for a while.

Napoleonic Wars 1803-1815.

After this the monarchy was re-established (for a while), nominally as a constitutional monarchy on the English model.

(4)