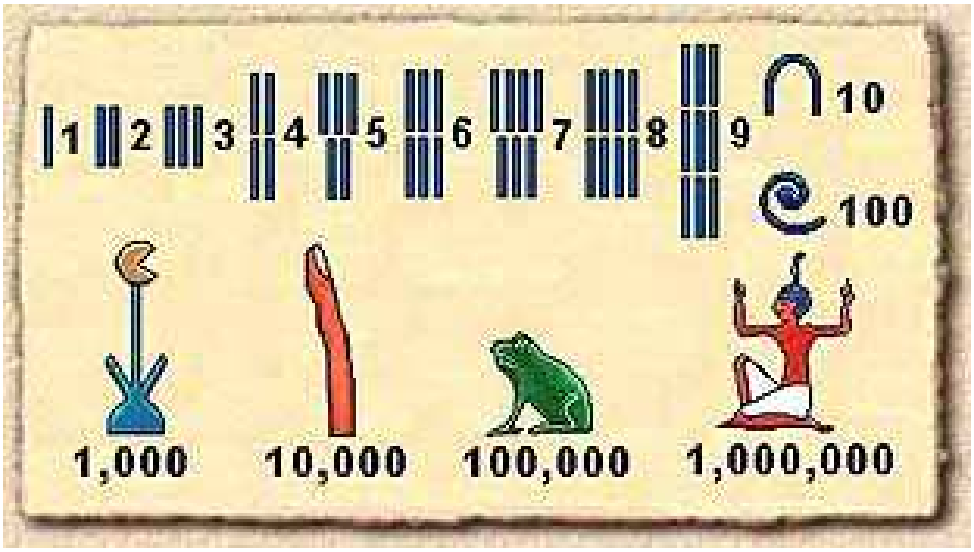
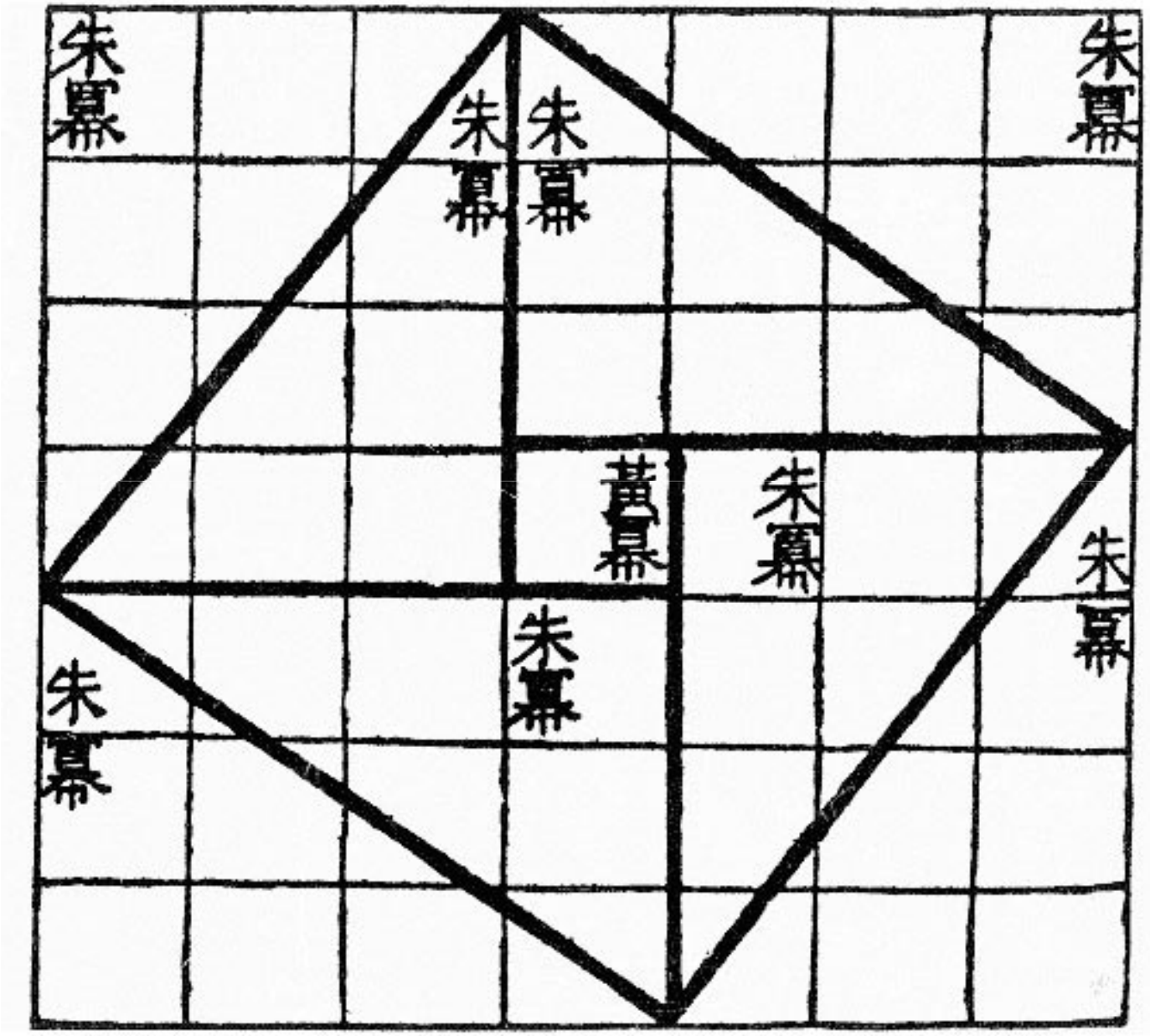


Ahmes

Egyptian Scribe who wrote the *Rhind Mathematical Papyrus* around 1650BC



Shang Gao

Mathematician in the

Zhou Bi Suan Jing

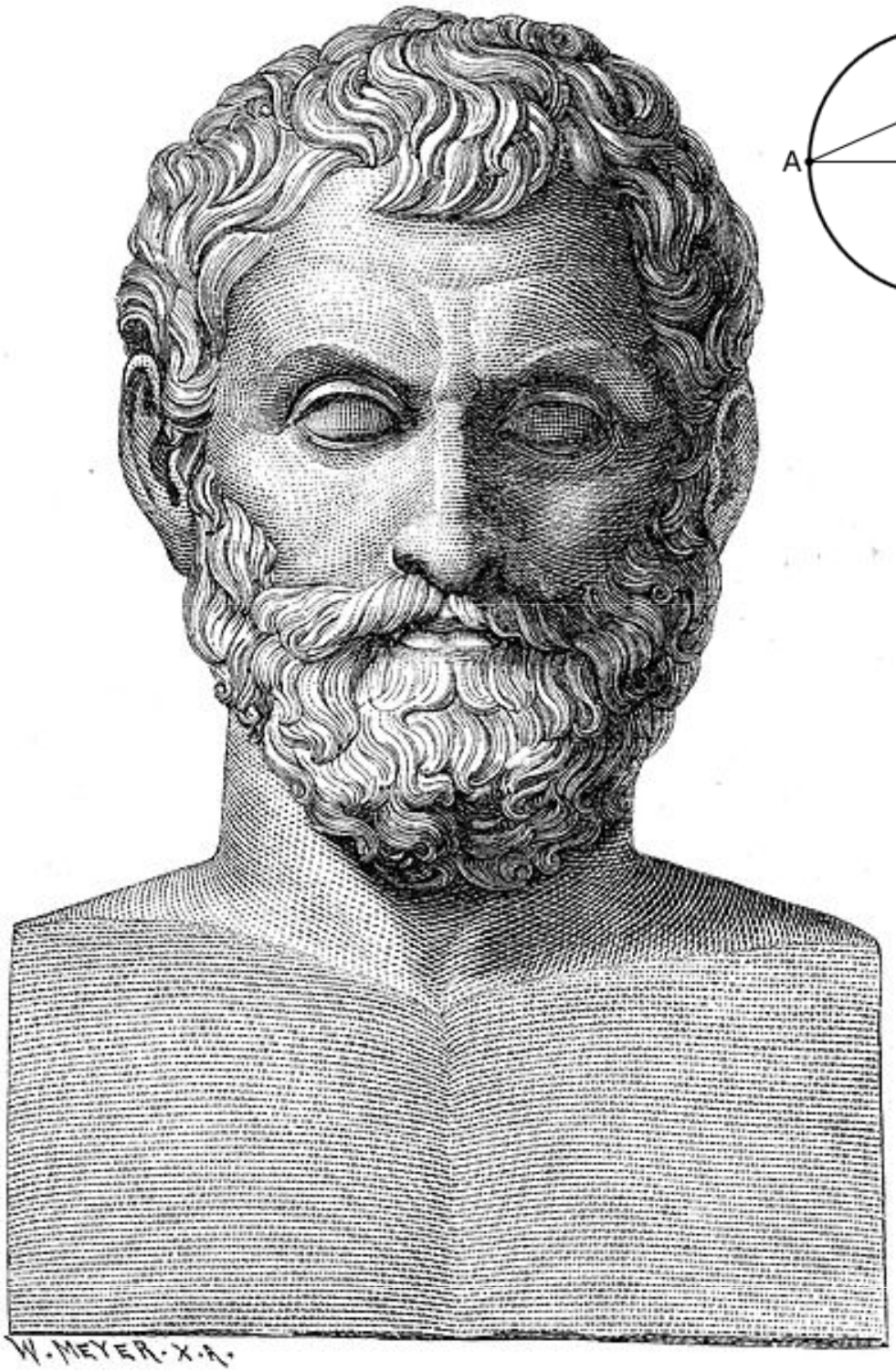
(1046-256 BC)

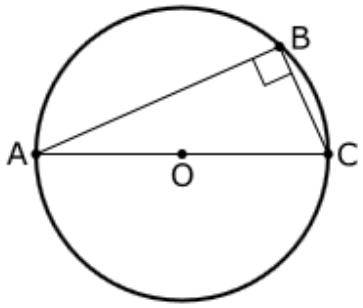
$$\sqrt{2}$$

$$=1.4142...$$

Baudhayana

Author of *Sulba Sutra*, which contained quadratic equations and the square root of 2 to 5.d.p (800 BC)

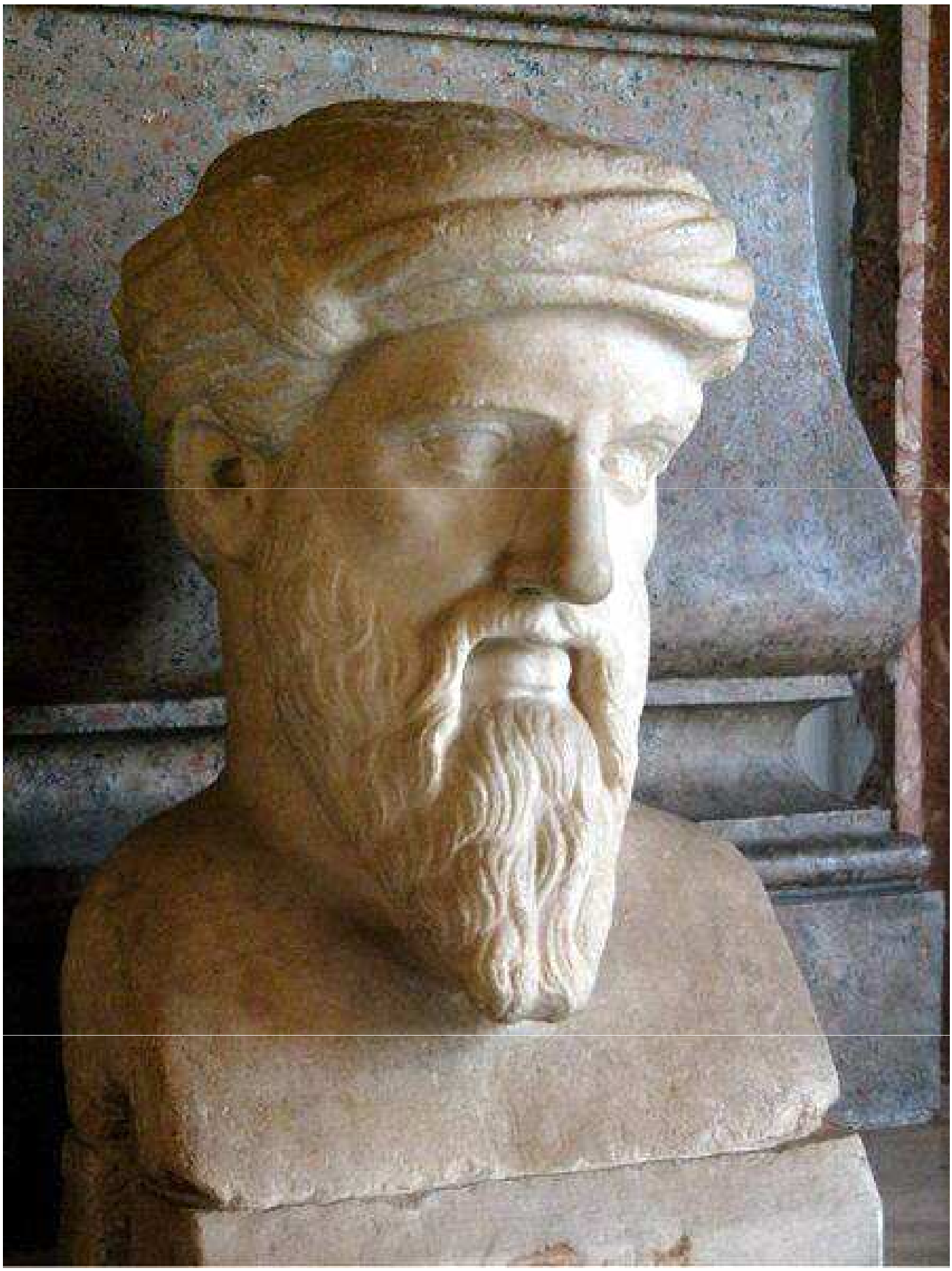




Thales

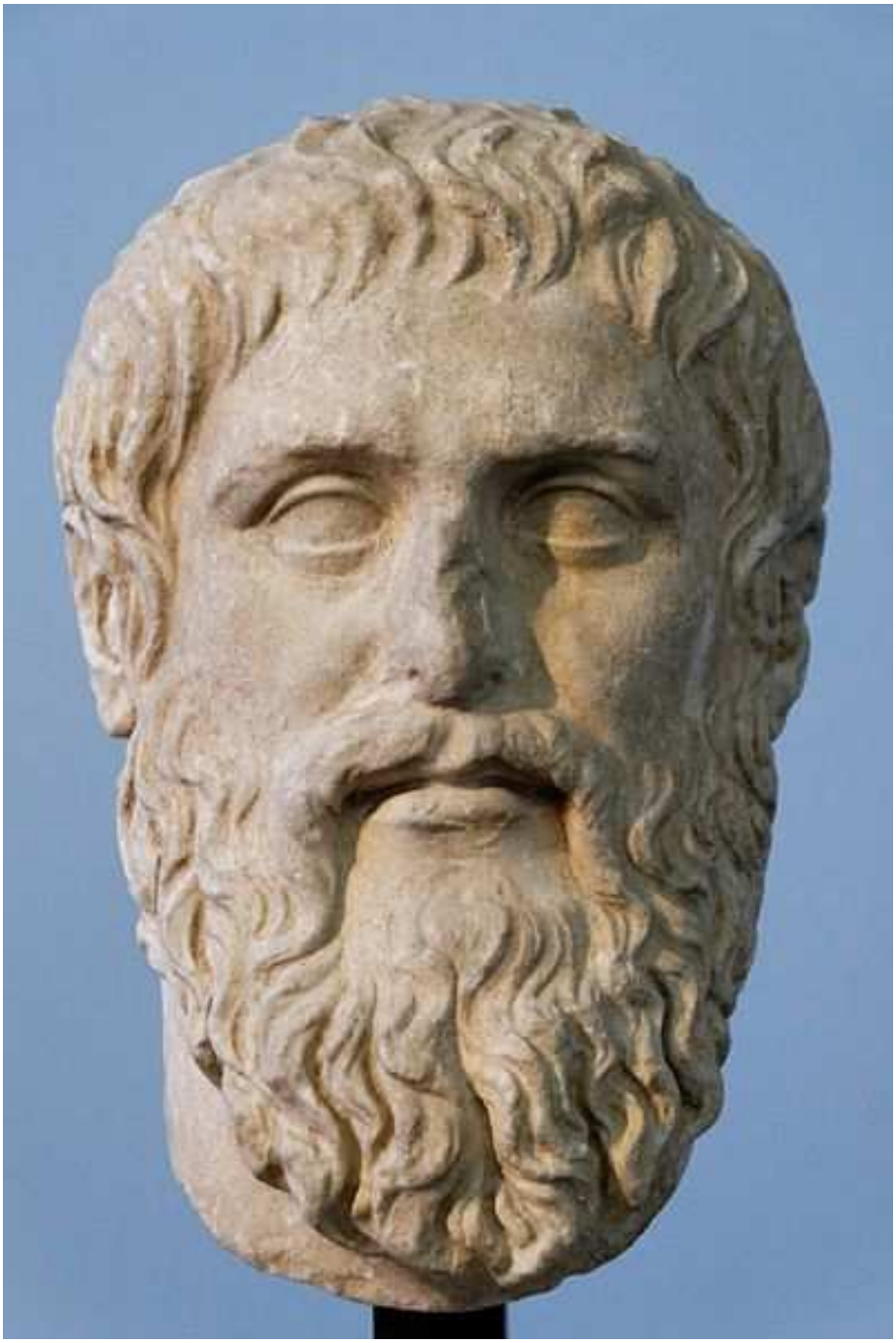
"The first philosopher in the Greek tradition"

(624-546 BC)



Pythagoras

(570 BC)



Plato

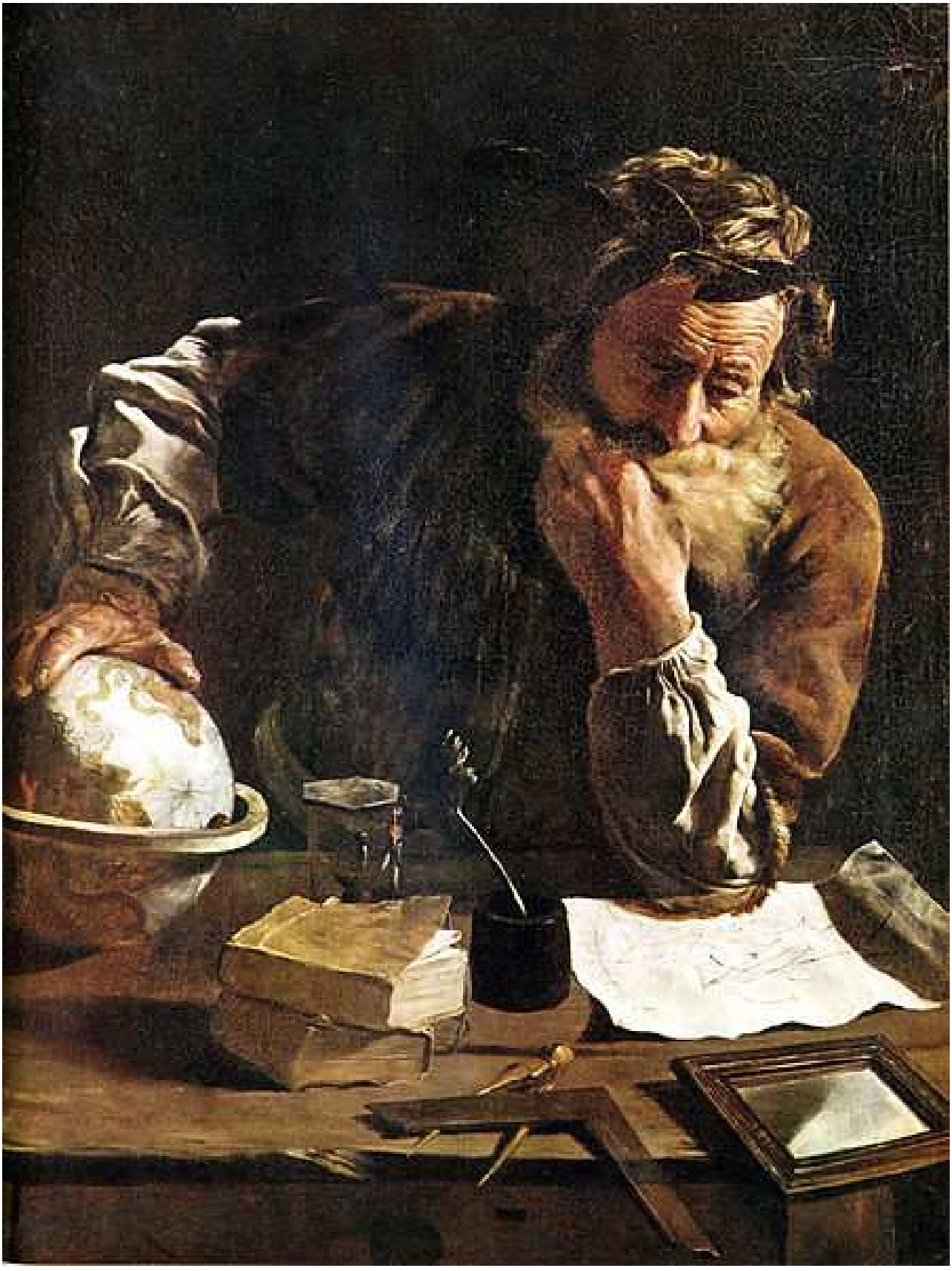
(428-347 BC)

Aristotle

(384-322 BC)

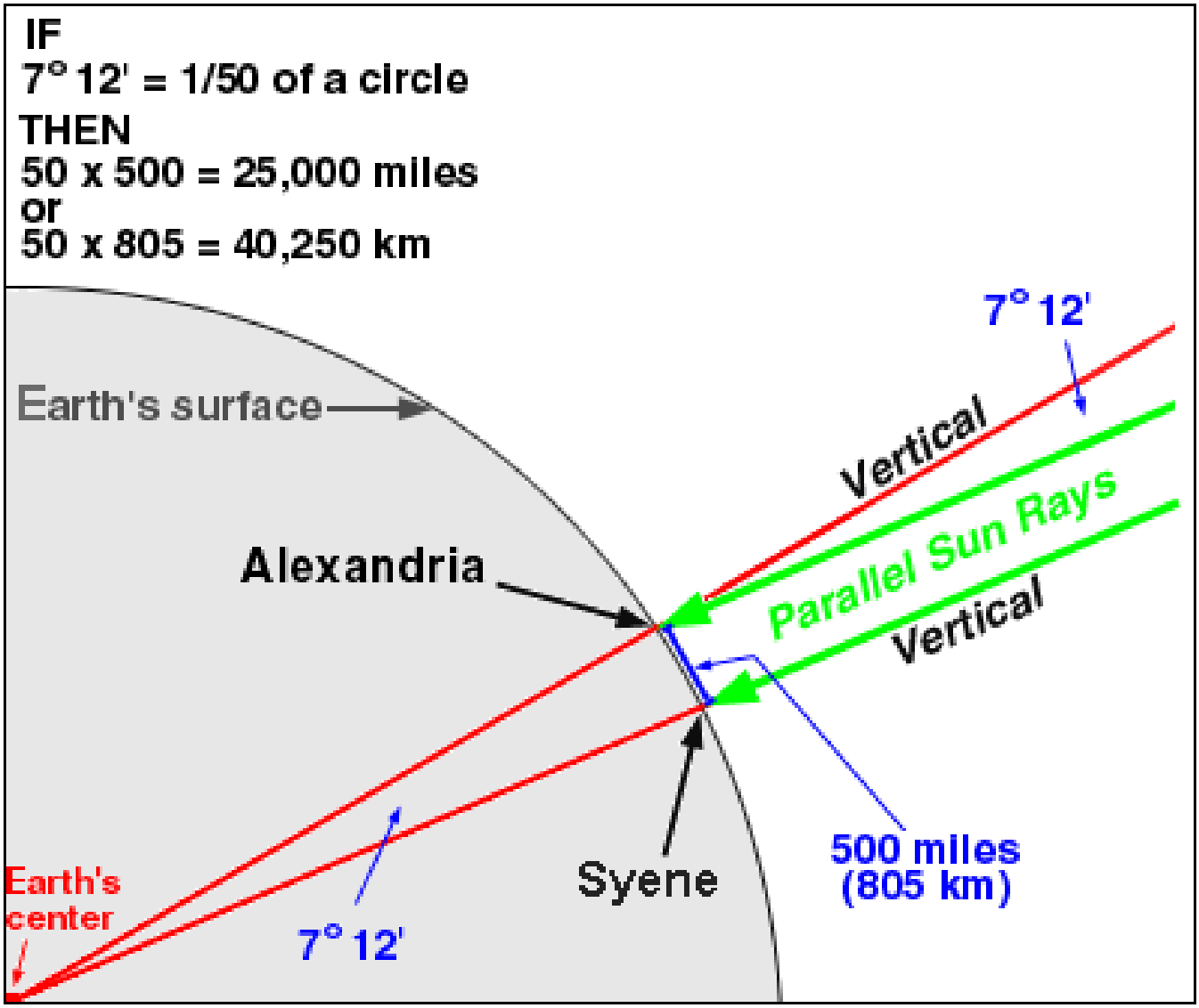
Euclid

(300 BC)



Archimedes

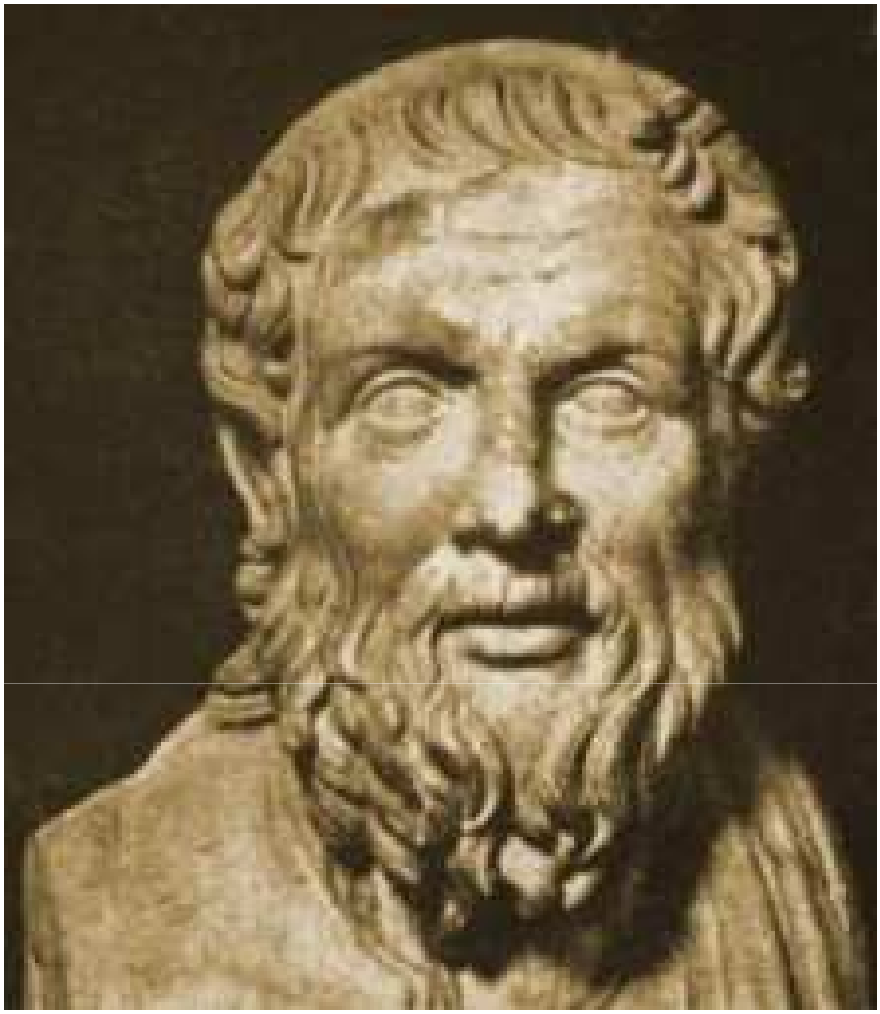
(287-212 BC)

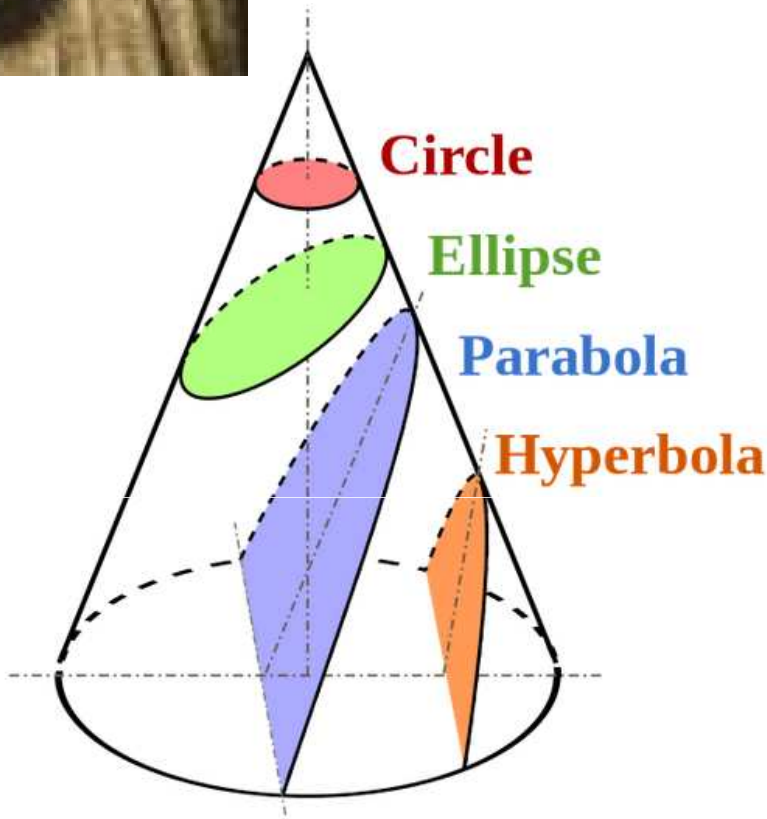


1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Eratosthenes

(276-194 BC)





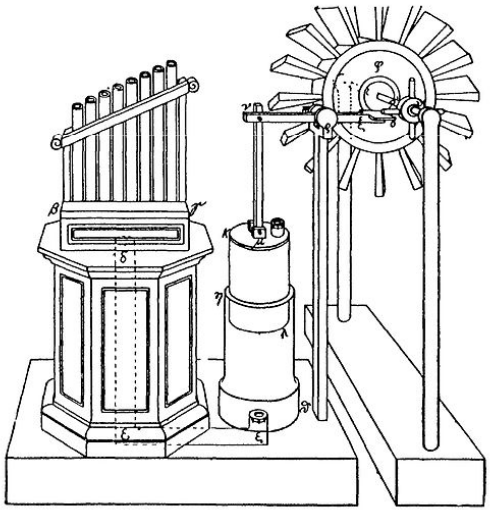
Apollonius of Perga

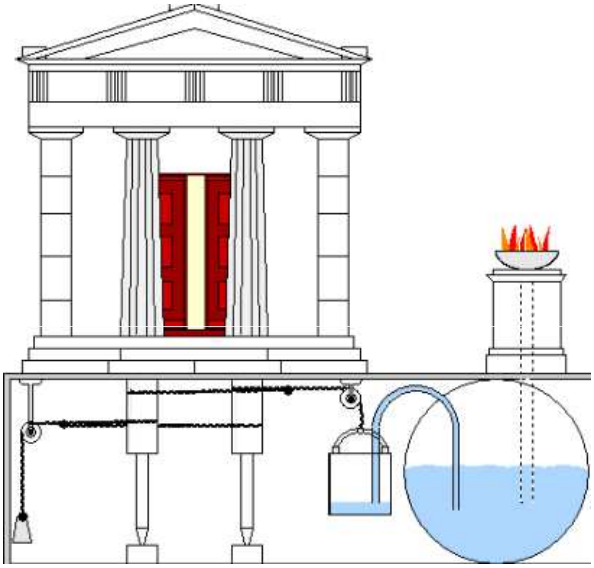
(262-190 BC)

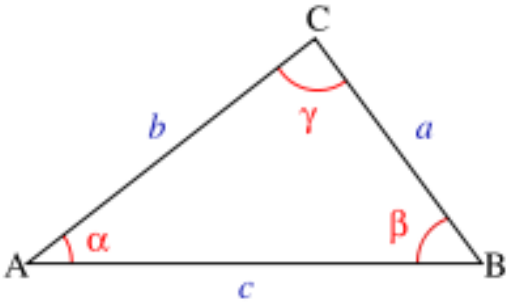
Hipparchus of Nicaea

Founder of trigonometry

(190-120 BC)







$$T = \sqrt{s(s-a)(s-b)(s-c)}$$

$$s = \tfrac{1}{2}\left(a+b+c\right)$$

Heron of Alexandria

(AD 10-70)

Ptolemy

Author of the cosmological textbook the *Almagest*

(AD 90-168)

“Here lies *Diophantus*,' the wonder behold.Through art algebraic, the stone tells how old: 'God gave him his boyhood one-sixth of his life, One twelfth more as youth while whiskers grew rife; And then yet one-seventh ere marriage begun; In five years there came a bouncing new son. Alas, the dear child of master and sage. After attaining half the measure of his father's life chill fate took him. After consoling his fate by the science of numbers for four years, he ended his life.”

Metrodorus

$$x = \tfrac{1}{6}x + \tfrac{1}{12}x + \tfrac{1}{7}x + 5 + \tfrac{1}{2}x + 4$$

$$x = 84$$

Diophantus

Author of *Arithmetica*

(AD 201-285)

Aryabhata

Quadratics, trigonometry

(AD 476-550)

zero

Brahmagupta

(AD 598-670)

Al-Khwarizmi

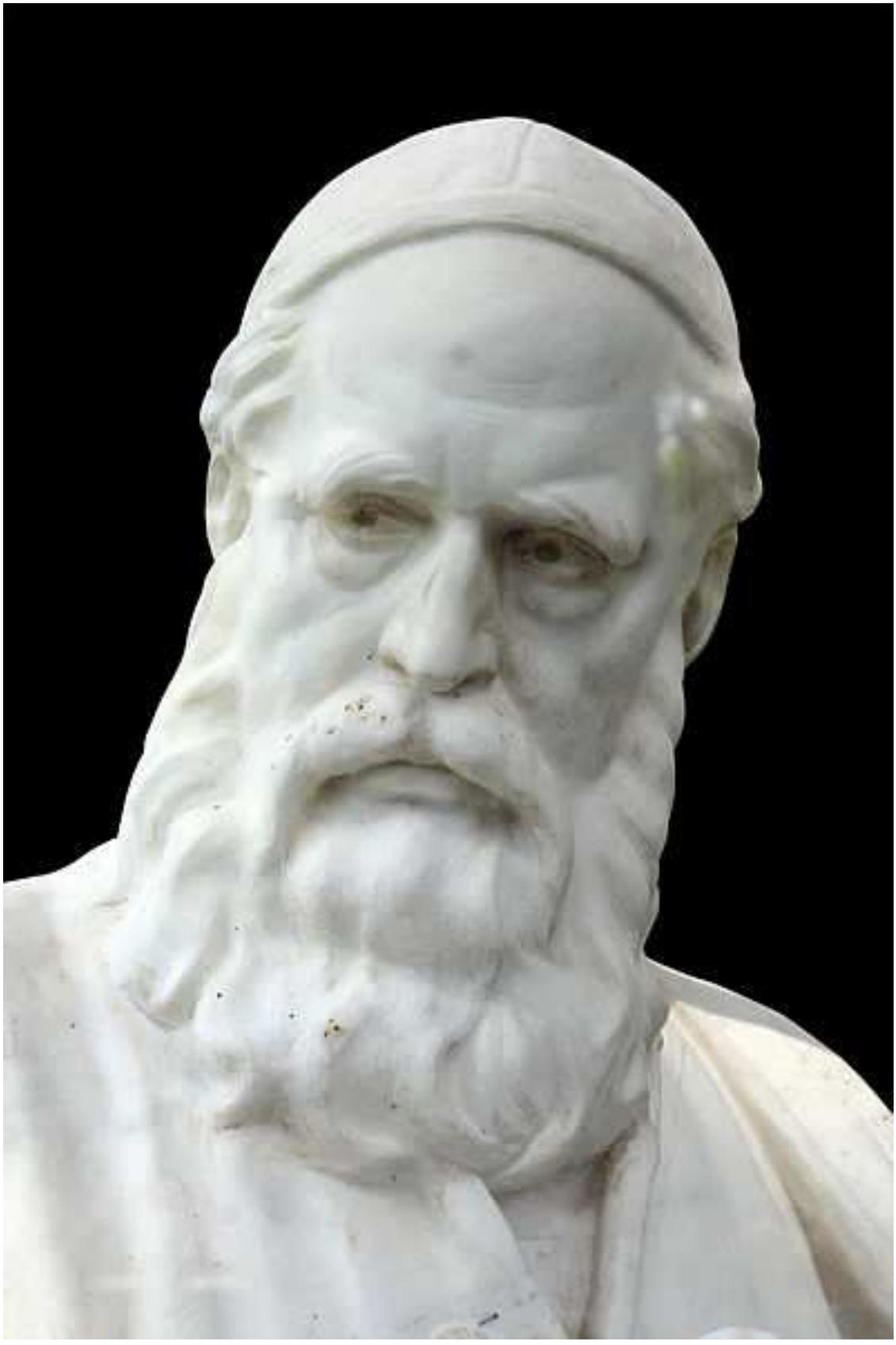
"The inventor of algebra"

(AD 780-850)

Al-Karaji

Father of *abstract* algebra

(AD 953-1029)



Omar Khayyám

(AD 1048-1131)

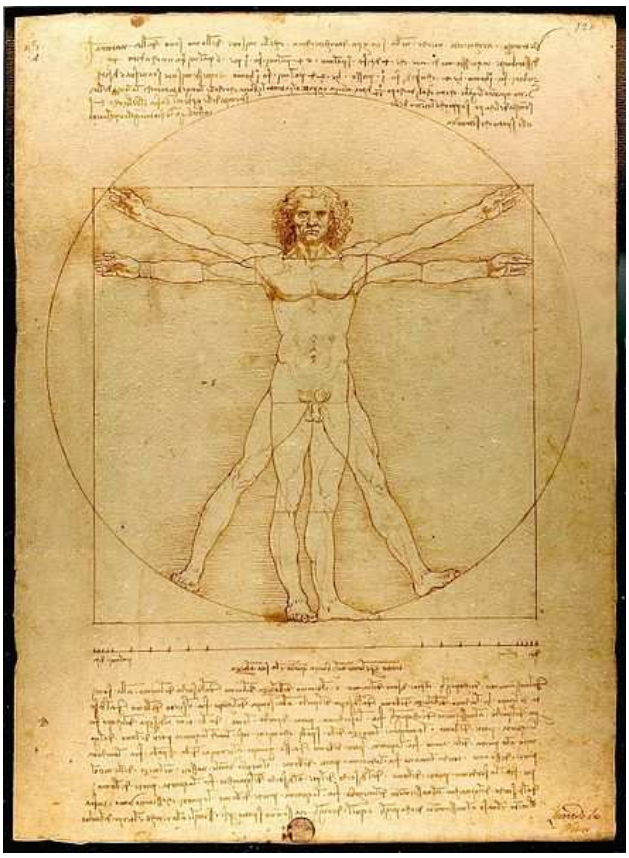
Leonardo Fibonacci

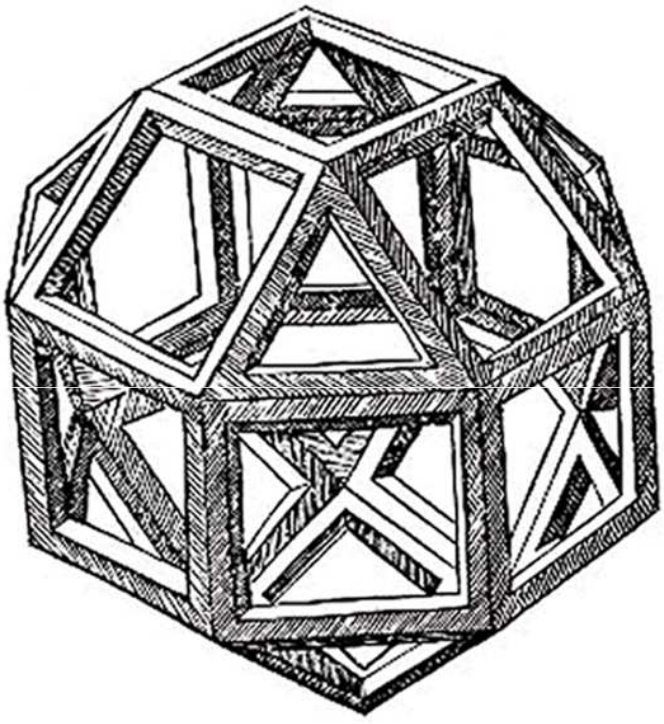
Introduced Indian/Arabic decimal numbers to Europe via *Liber Abaci*

(1170-1250)

Luca Pacioli

(1445-1517)





Leonardo da Vinci

(1452-1519)

Gerolamo Cardano

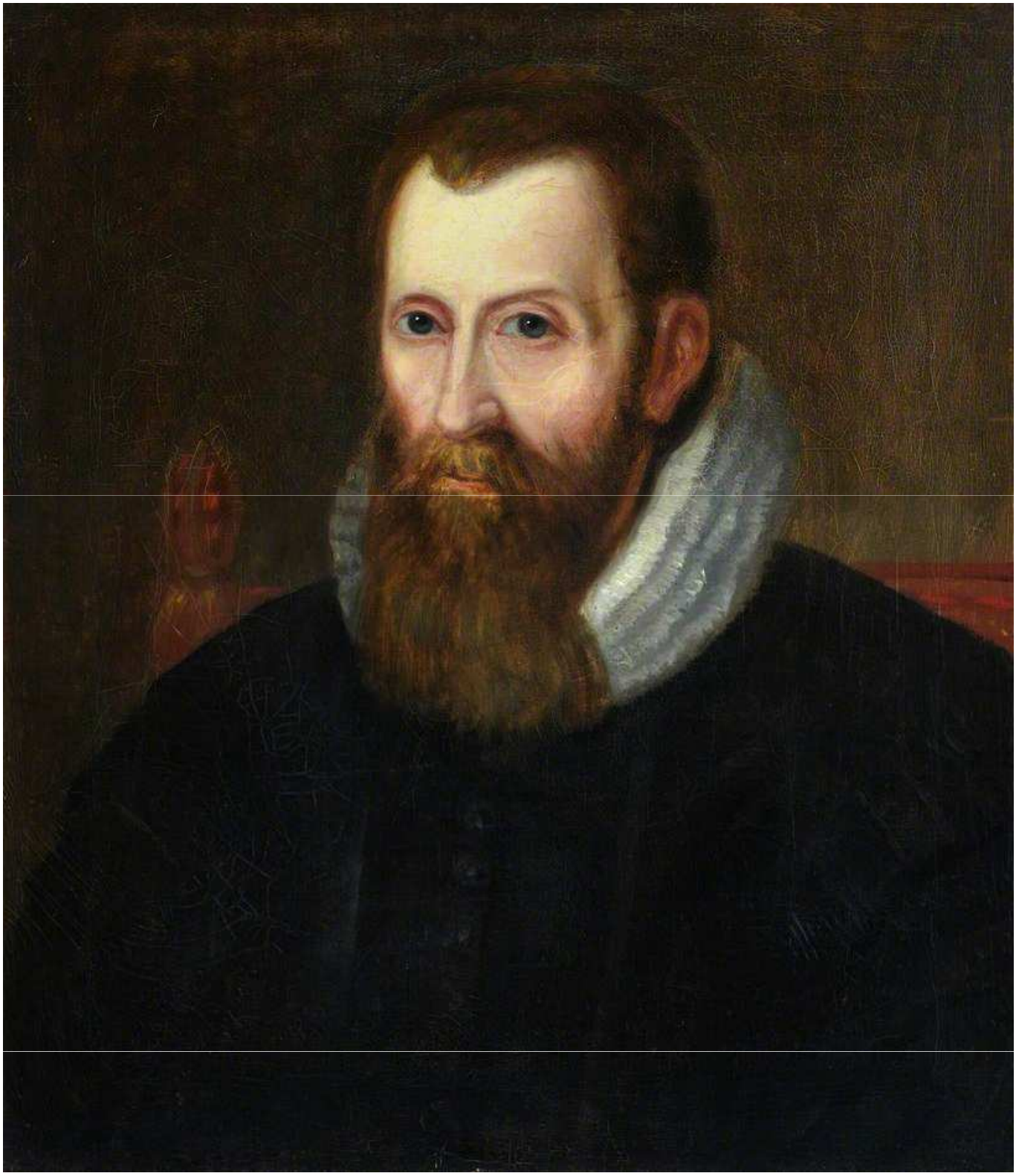
Cubics, probability...

(1501-1576)

Lodovico Ferrari

Quartic equations

(1522-1565)



John Napier

Inventor of logarithms

(1550-1617)

Johanes Kepler

Laws of elliptic planetary motion

(1571-1630)

René Descartes

Cartesian x,y coordinate system linking algebra and geometry

(1596-1650)

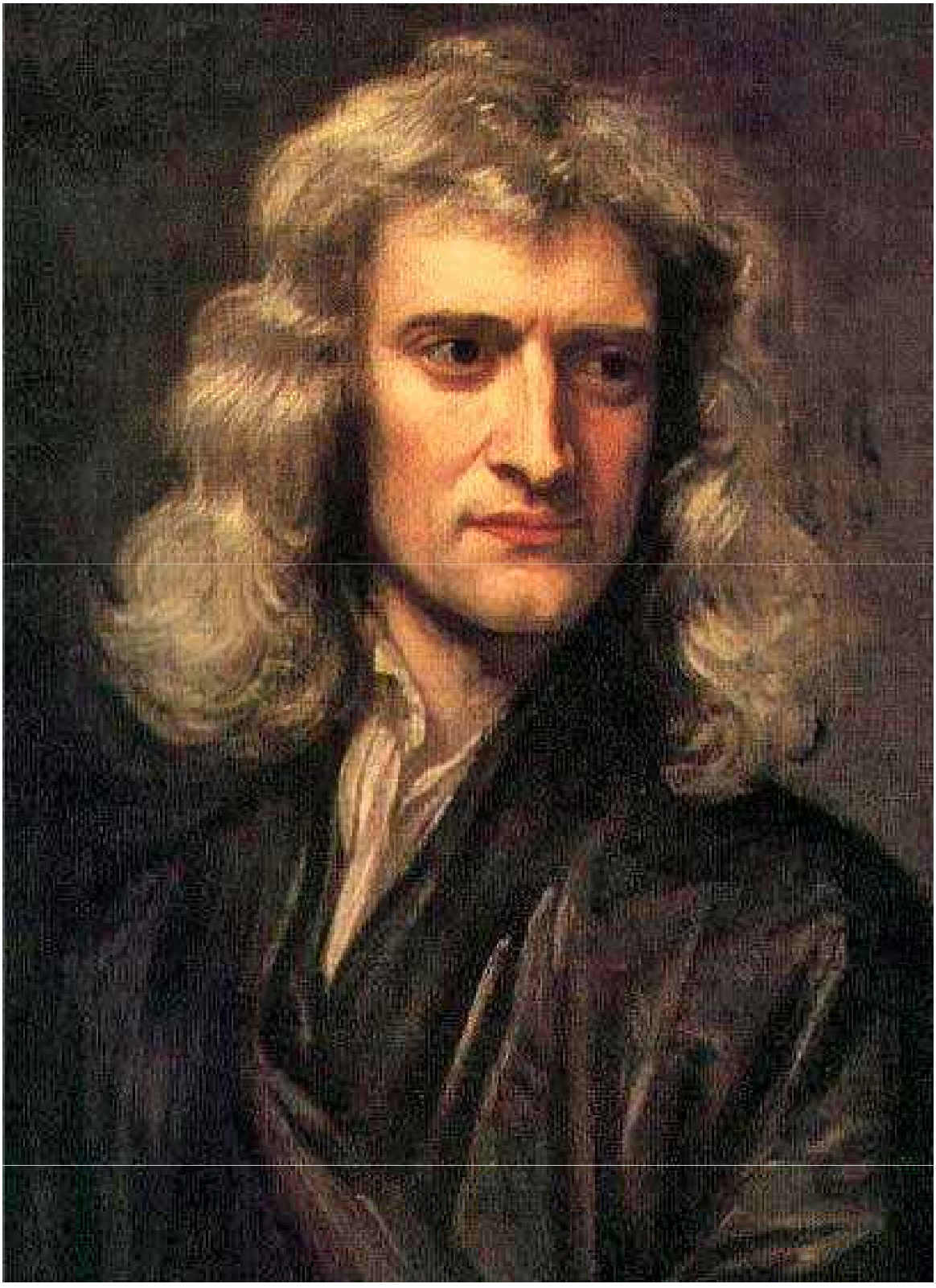
Pierre de Fermat

Number theory, geometry, optics, probability

(1601-1665)

Blaise Pascal

Pascal’s triangle,
hydrodynamics,
calculating machines
(1623-1662)



Isaac Newton

Mechanics, gravity, calculus, optics, *Principia* (1642-1643)

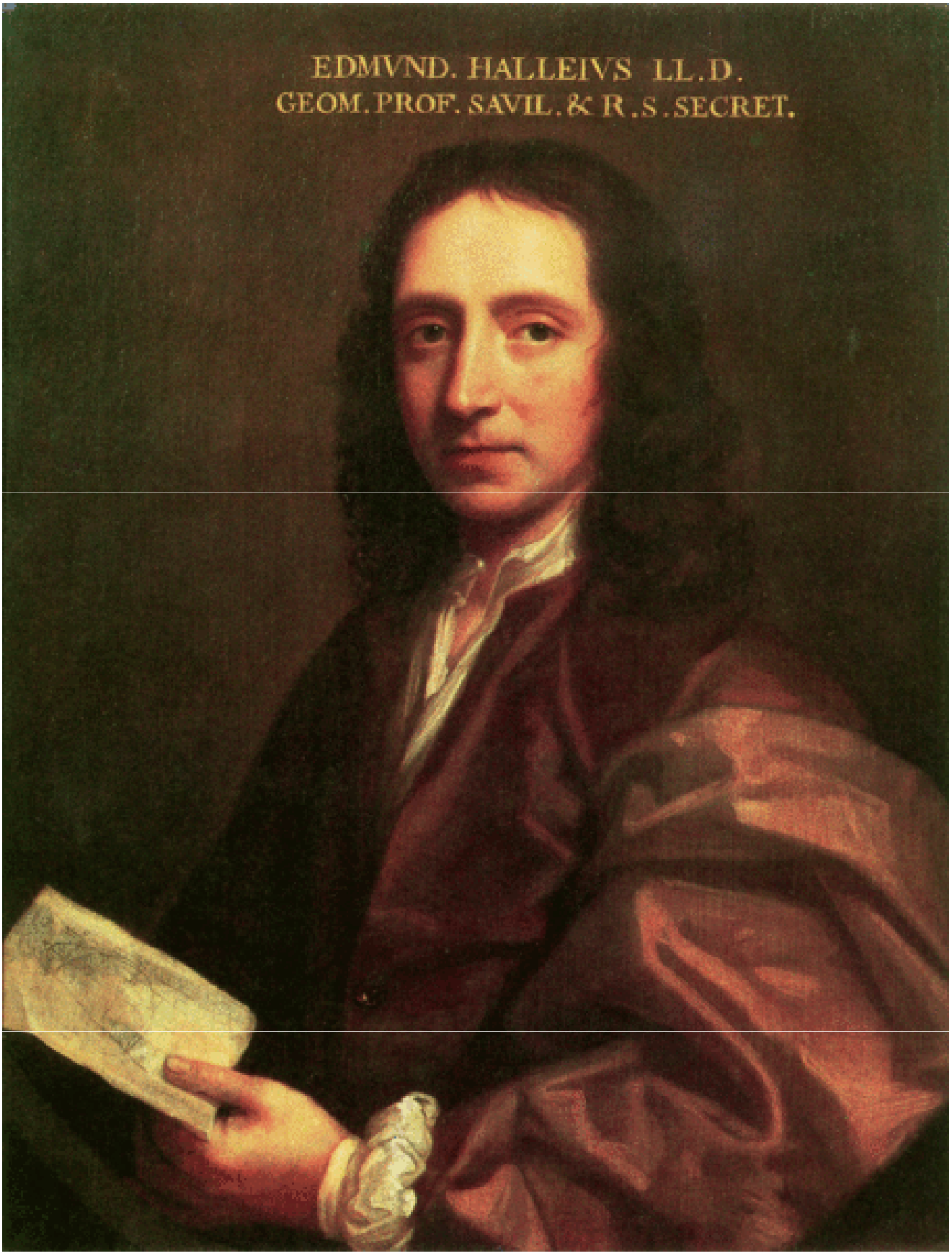
Gottfried Leibnitz

Calculus, calculating machines, philosophy ...

(1646-1716)

The Bernoulli Family

(1654-1789)



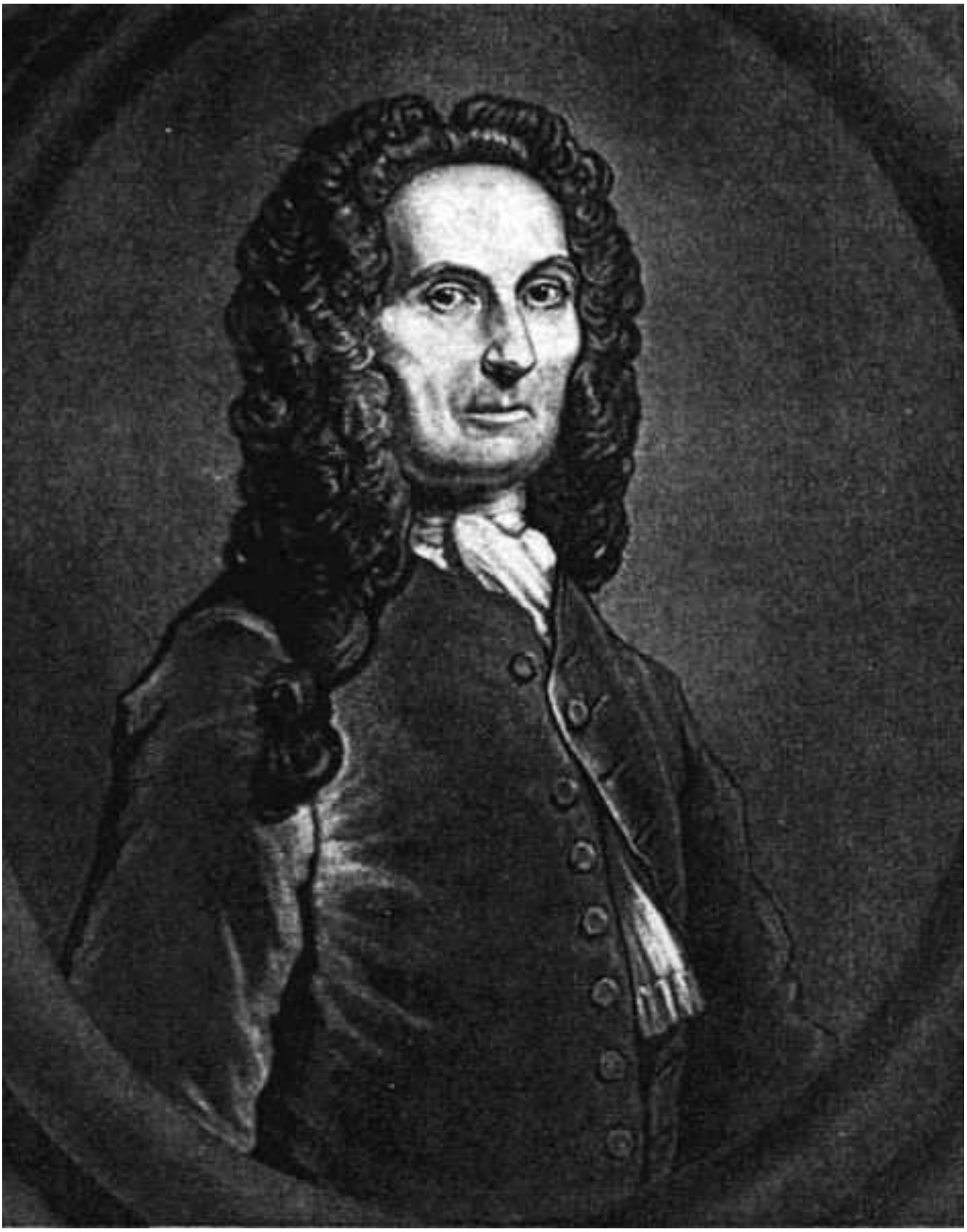
Edmund Halley

(1656-1742)

Guillaume de L’Hôpital

Differential calculus

(1661-1704)



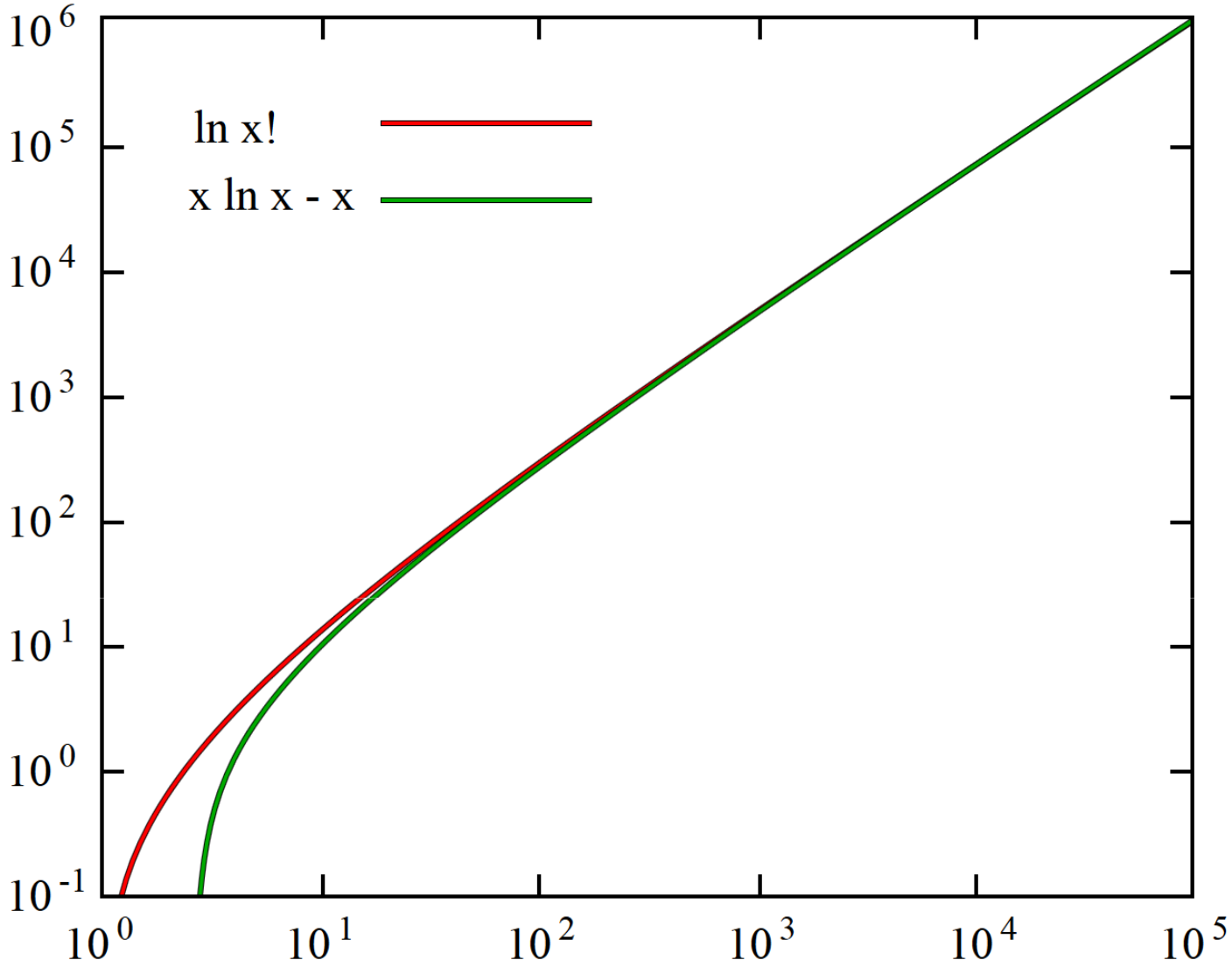
Abraham de Moivre

Complex numbers, probability

(1667-1754)

Brook Taylor

(1685-1731)



$$n! \approx \left(\frac{n}{e}\right)^n \sqrt{2\pi n}$$

James Stirling

(1692-1770)

Colin Maclaurin

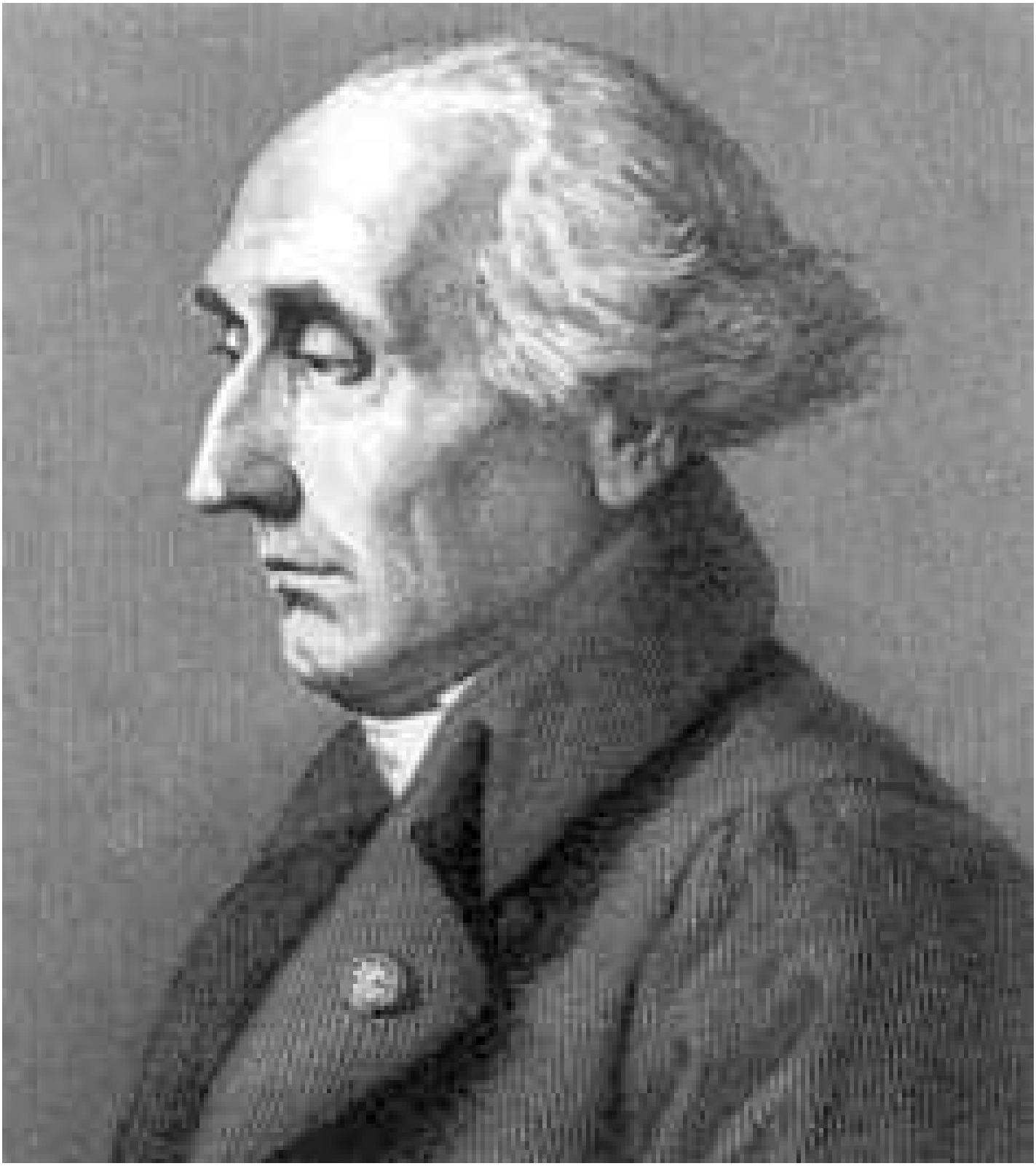
(1698-1746)

Thomas Bayes

(1701-1761)

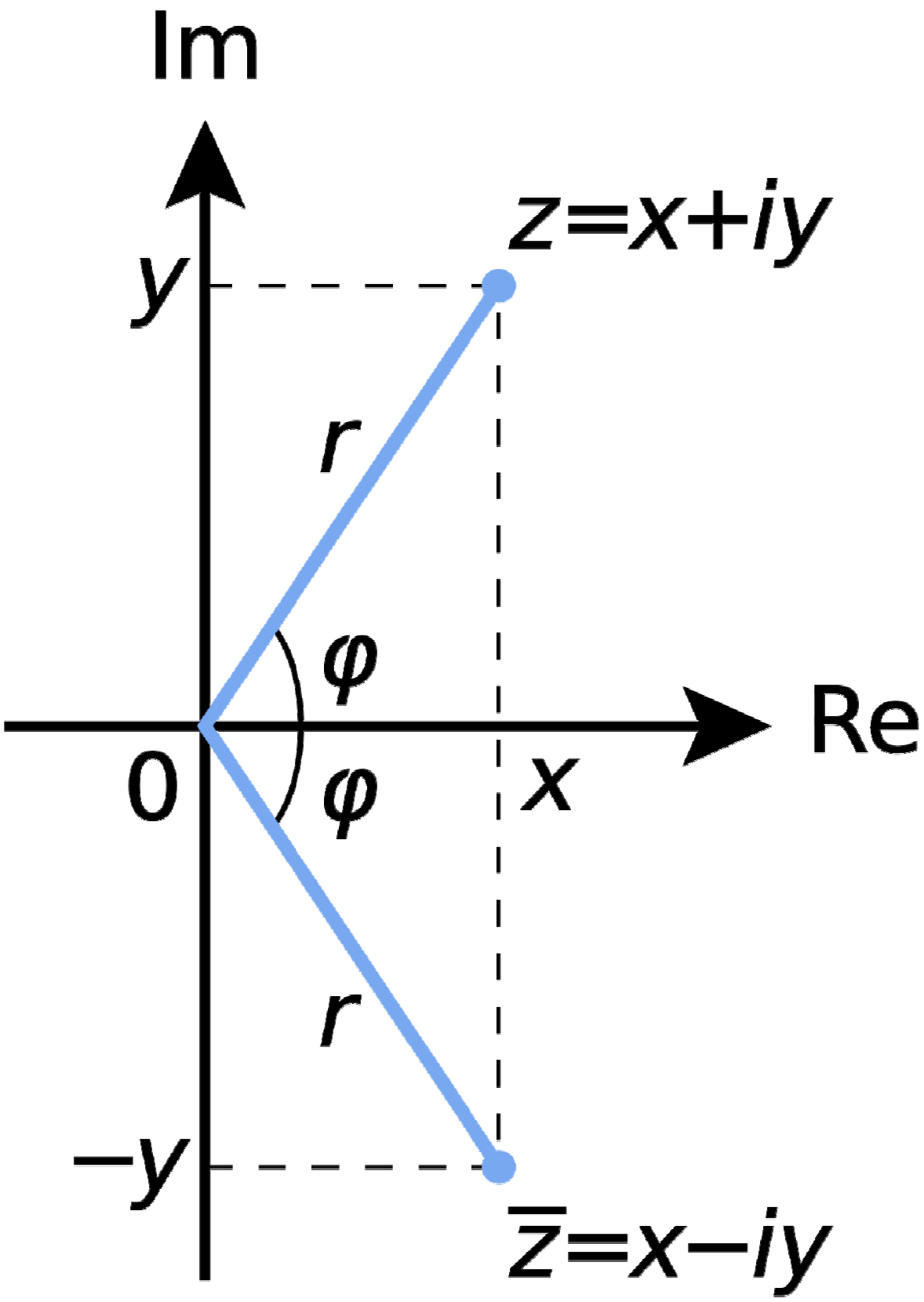
Leonhard Euler

(1707-1783)



Joseph Louis Lagrange

(1736-1813)



Jean-Robert Argand

(1768-1822)

Joseph Fourier
(1768-1830)

André-Marie Ampère

(1775-1836)

Carl Friedrich Gauss

(1777-1855)

Siméon Denis Poisson

(1781-1840)

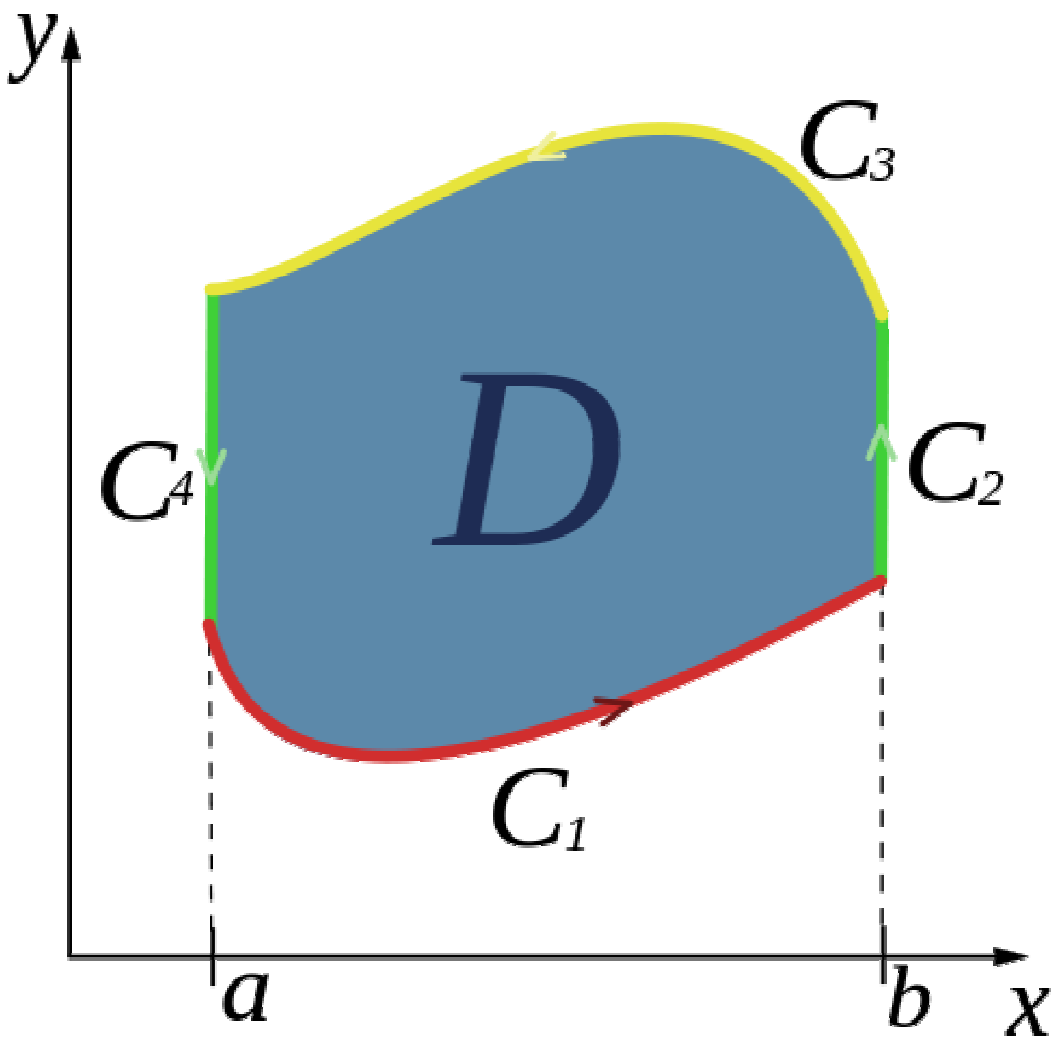
Augustin-Louis Cauchy

(1789-1857)

A. F. Möbius.

August Ferdinand Möbius

(1790-1868)



$$\oint_C \left(P dx + Q dy \right) = \iint_D \left(\frac{\partial Q}{\partial x} - \frac{\partial P}{\partial y} \right) dx dy$$

George Green

(1793-1841)

$$i^2 = j^2 = k^2 = ijk = -1$$

William Hamilton

Mechanics, quaternions

(1805-1885)

Évariste Galois

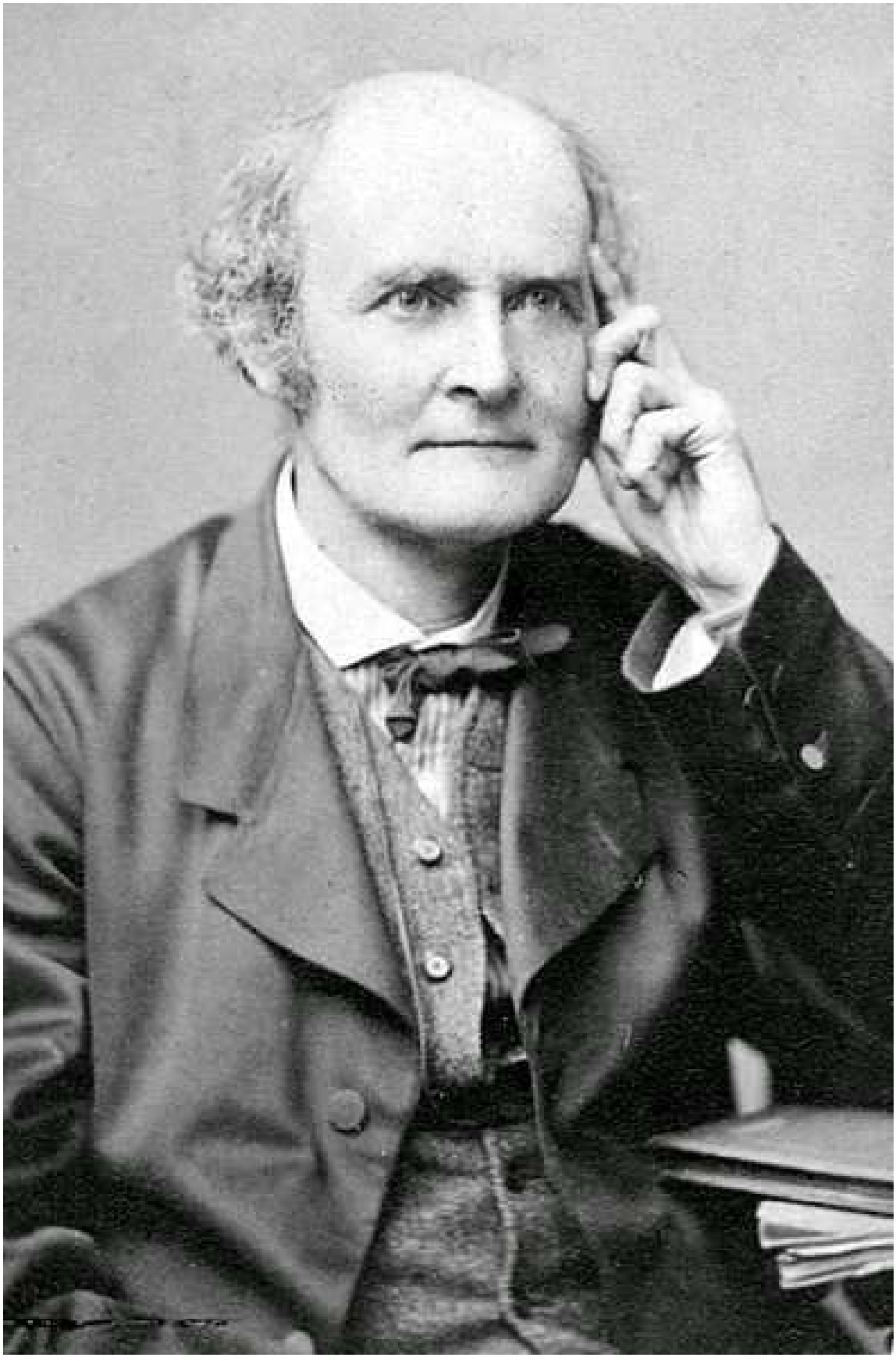
(1811-1832)

George Boole

(1815-1864)

George Gabriel Stokes

(1819-1903)

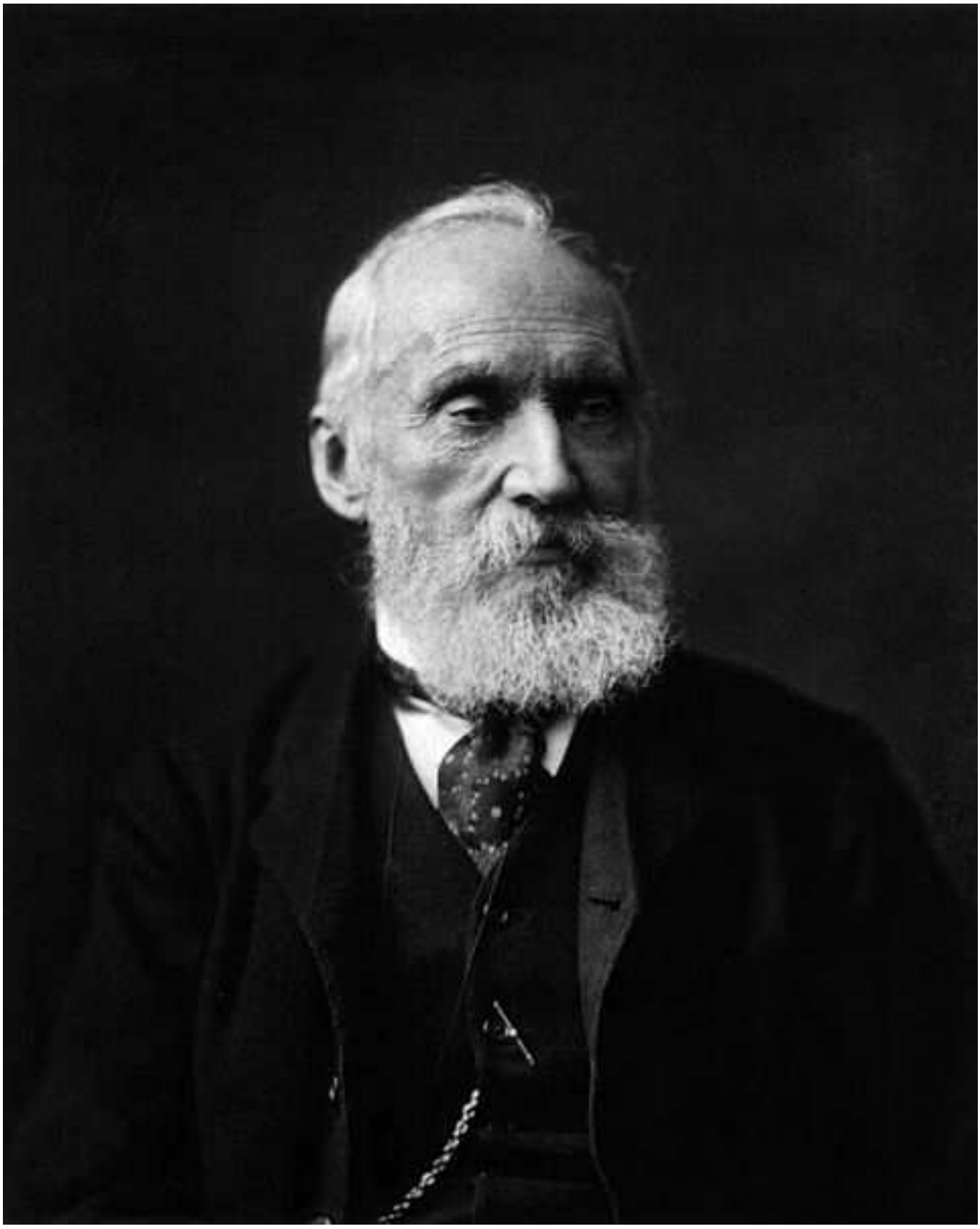


Arthur Cayley

(1821-1895)

Charles Hermite

(1822-1901)



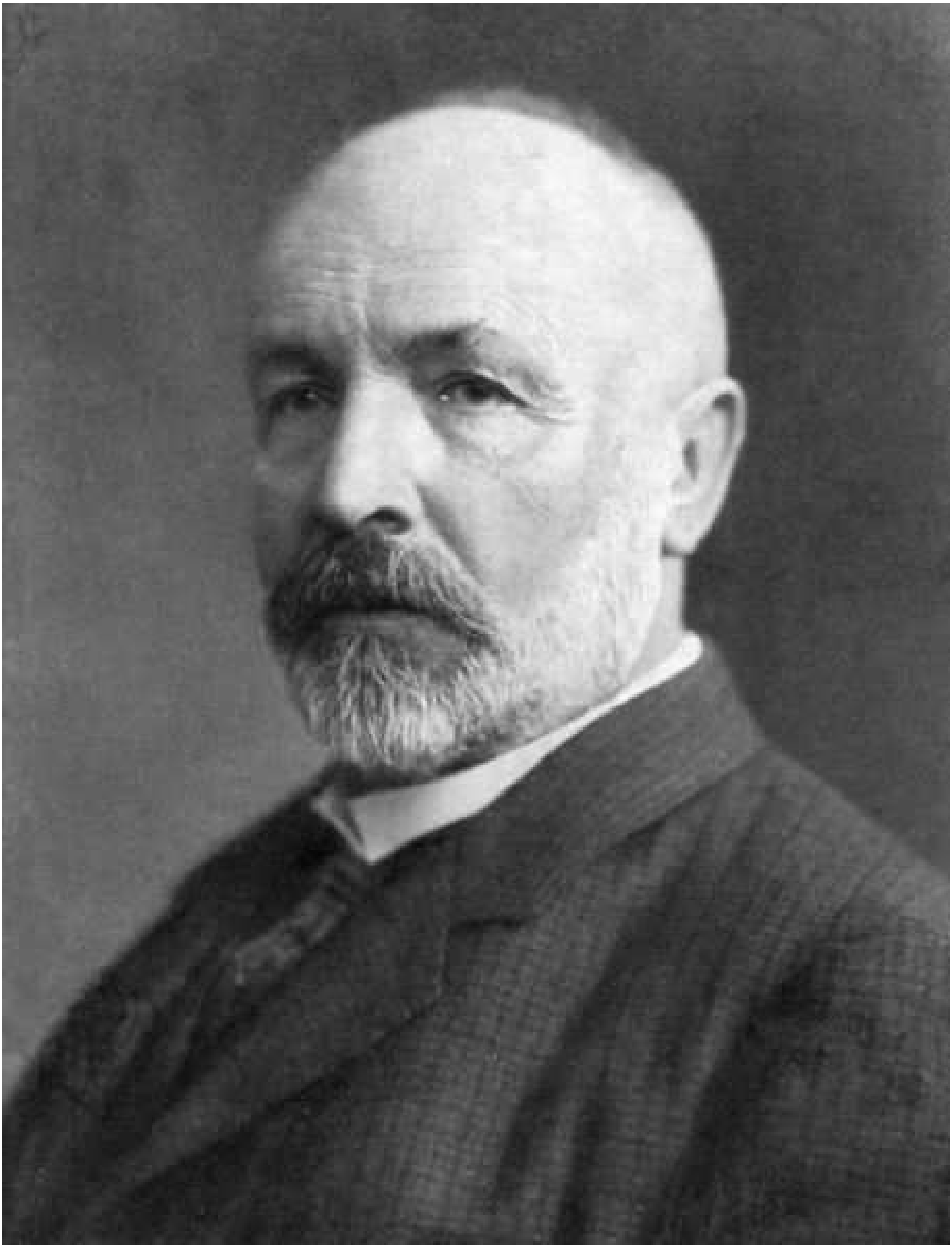
Lord Kelvin
(William Thompson)
(1824-1907)

Bernhard Riemann

(1826-1866)

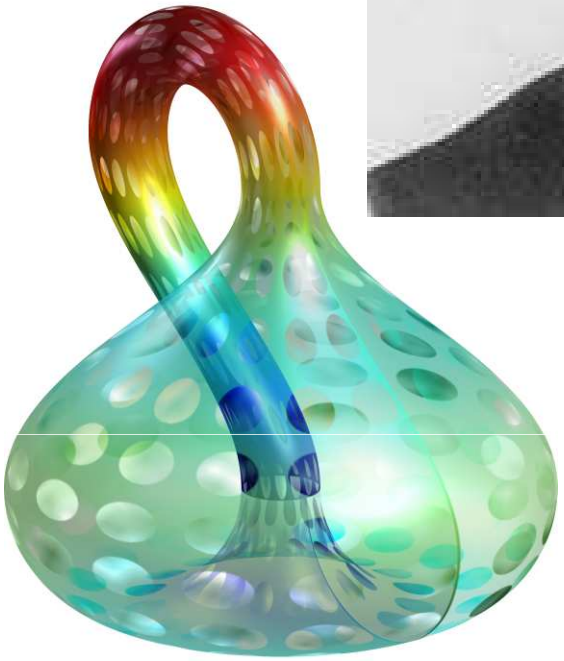
James Clerk Maxwell

(1831-1879)



Georg Cantor

(1845-1918)

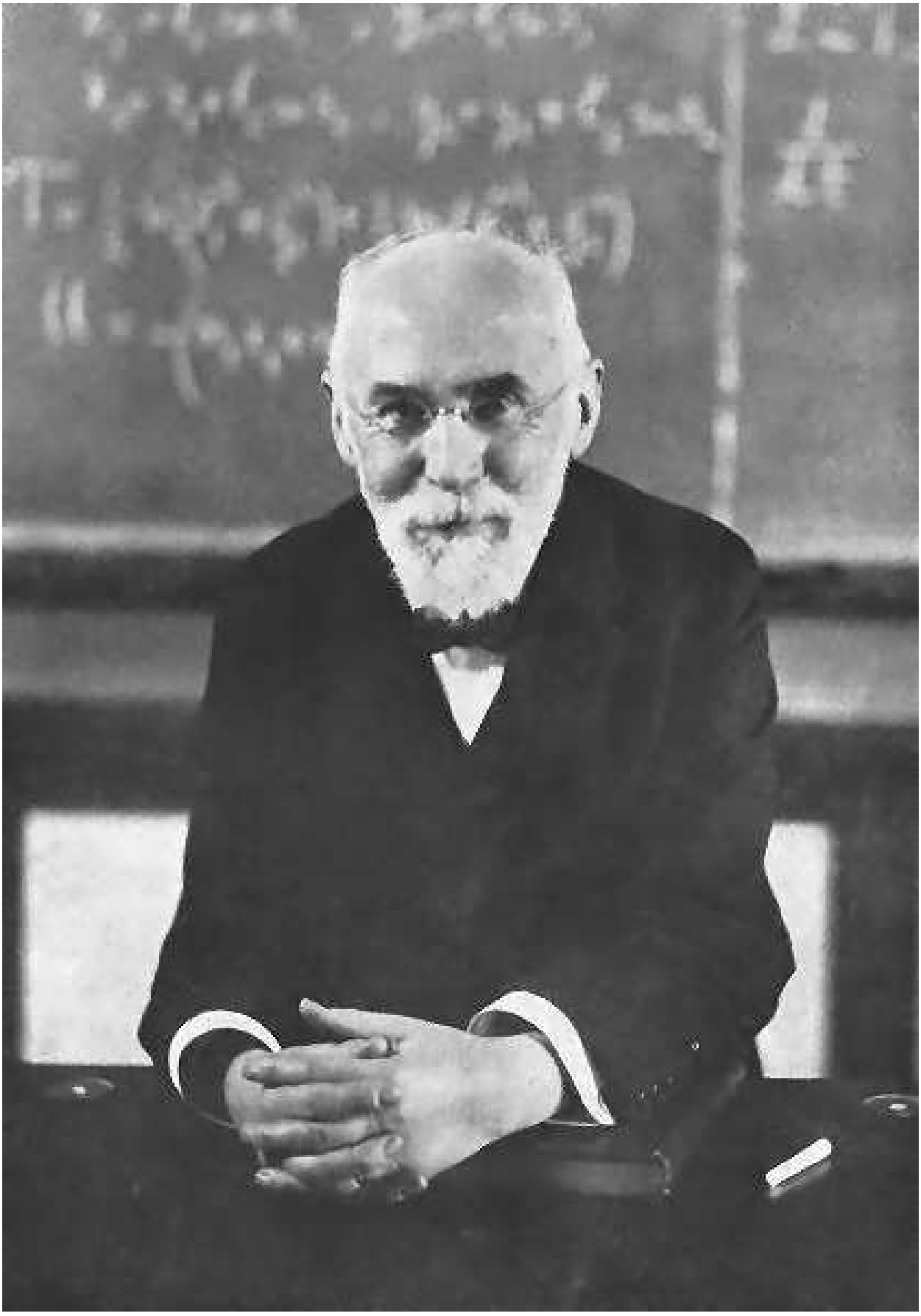


Felix Klein

(1849-1925)

Georg Frobenius

(1849-1917)



Henrik Lorentz

(1853-1928)

Henri Poincaré

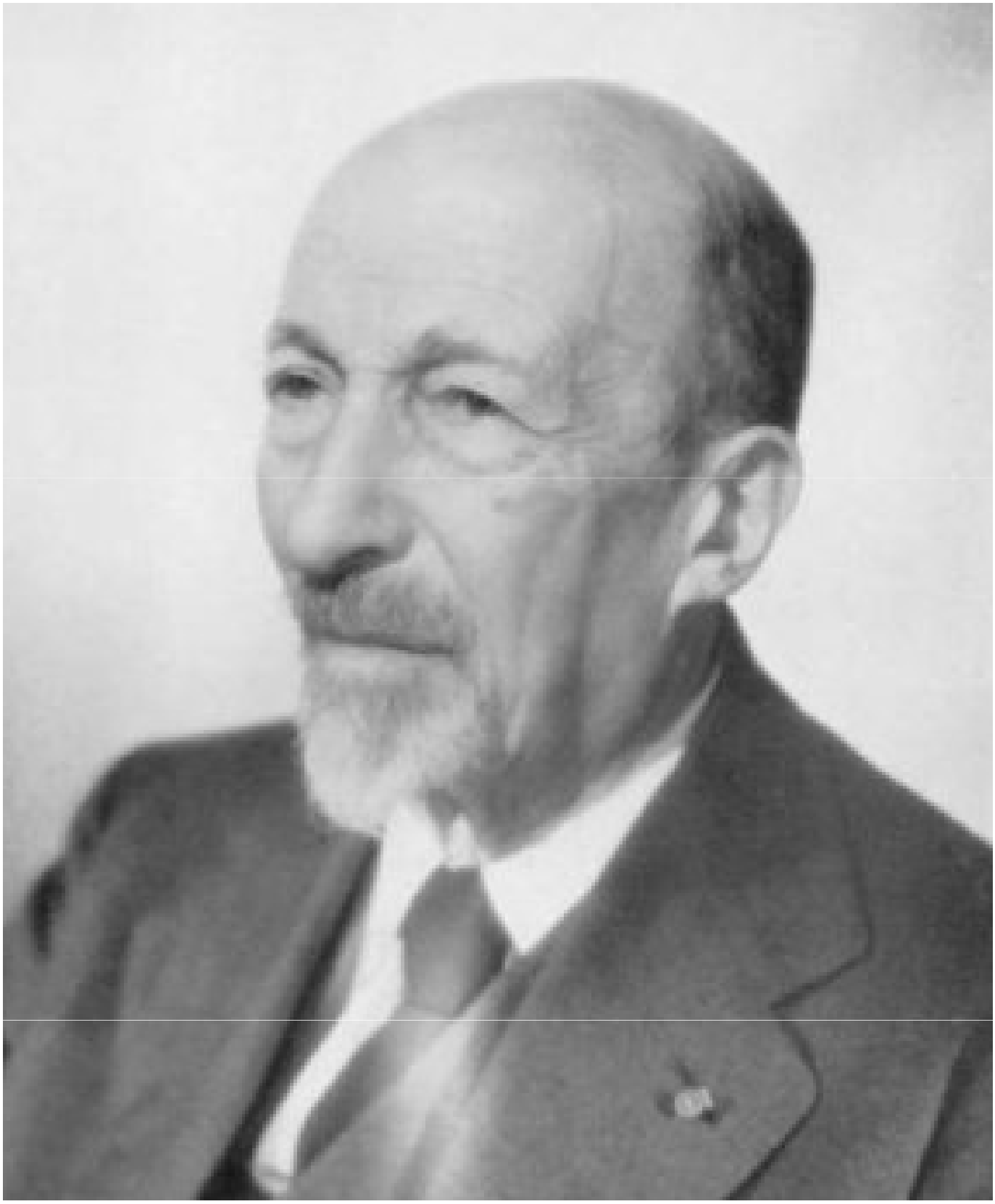
(1854-1912)

David Hilbert

(1862-1943)

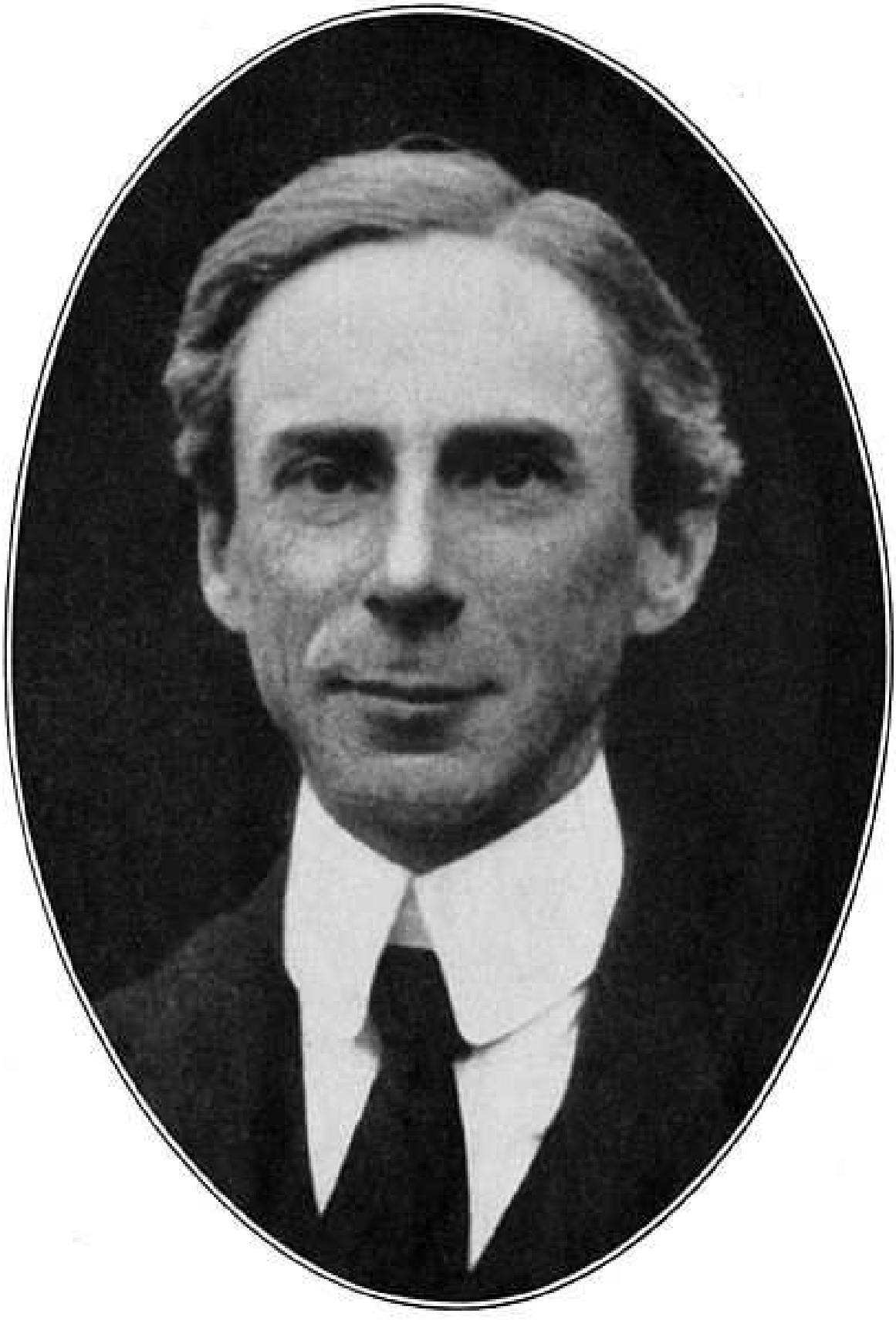
Hermann Minkowski

(1864-1909)



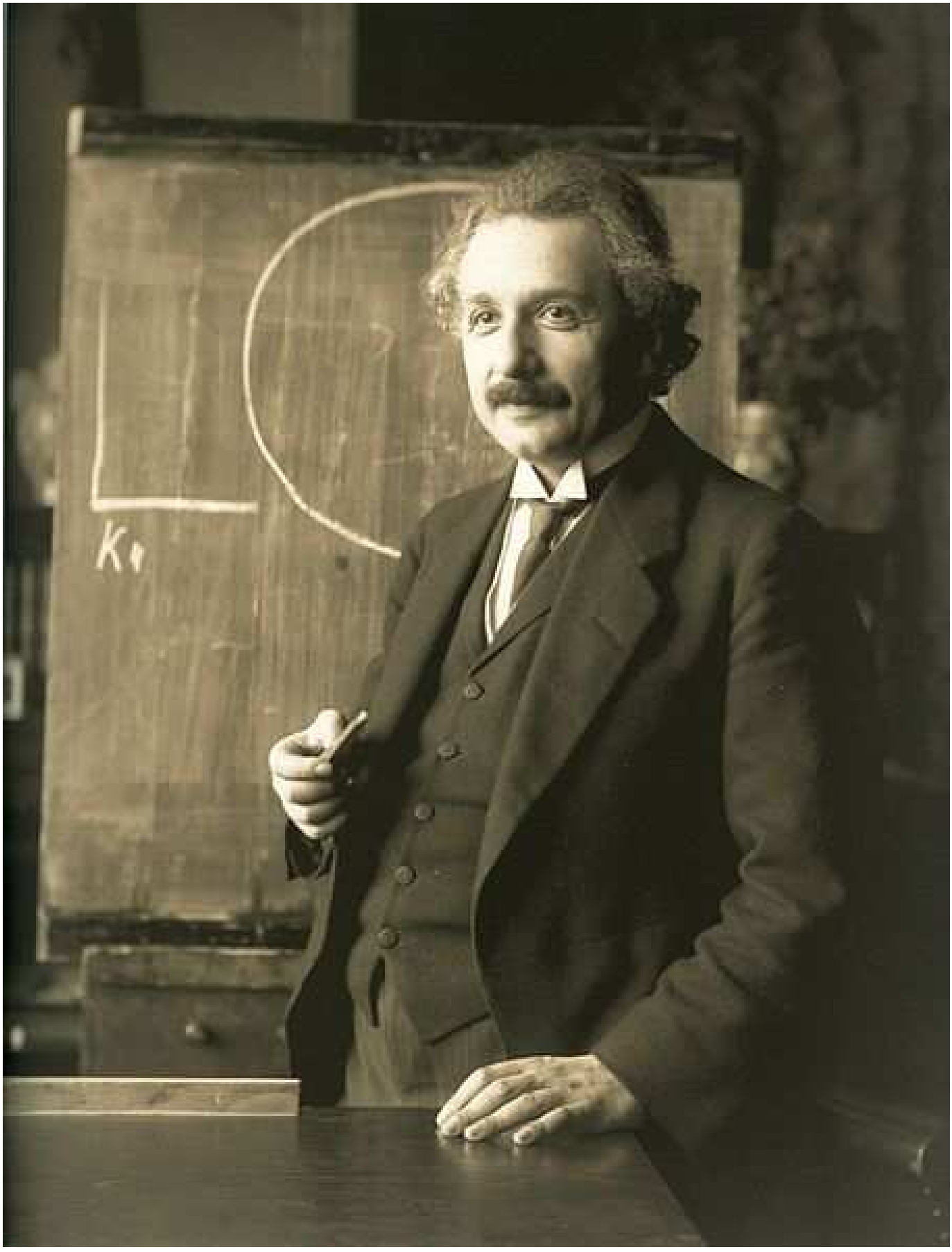
Jacques Hadamard

(1865-1963)



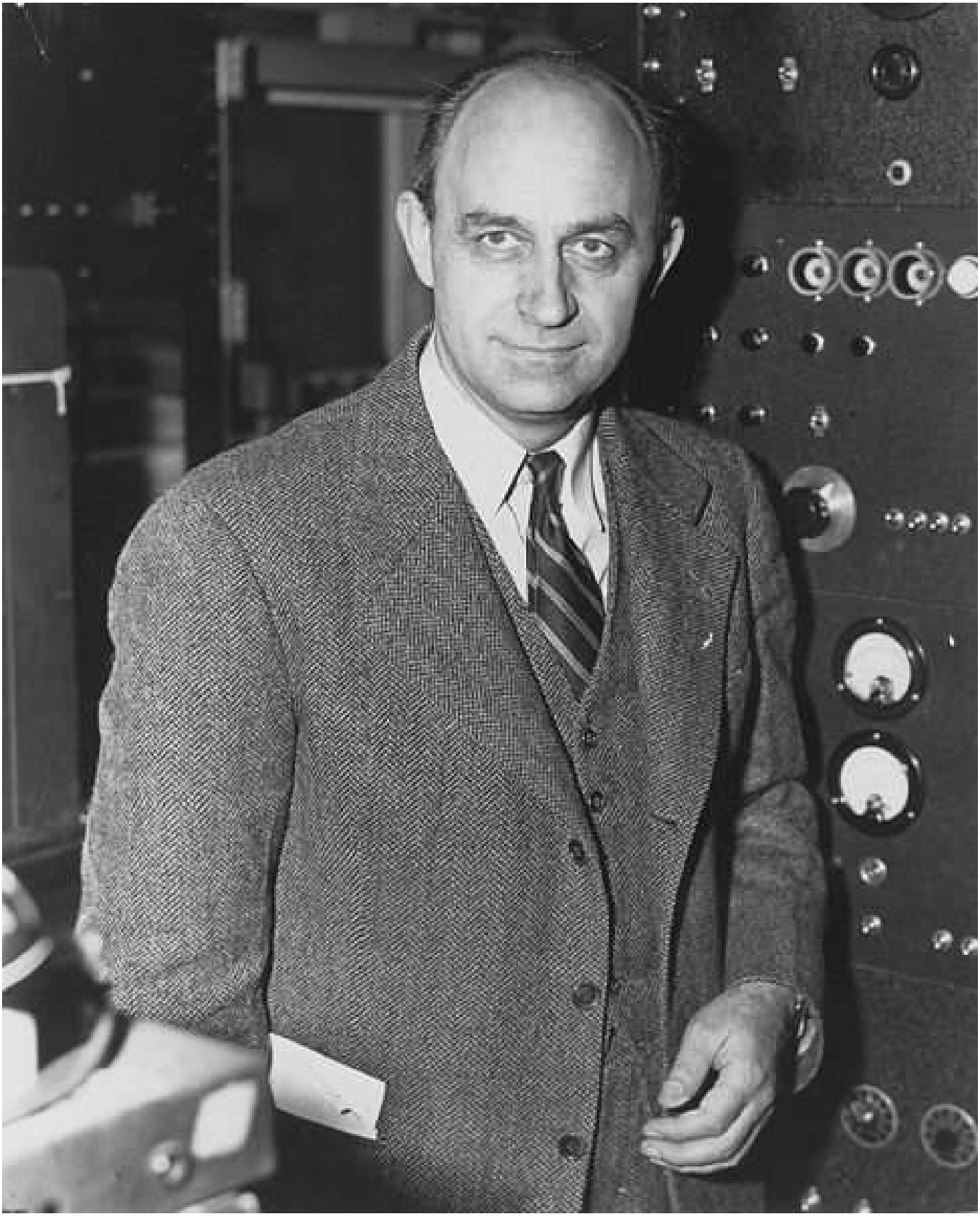
Bertrand Russell

(1872-1970)



Albert Einstein

(1879-1955)



Enrico Fermi

(1901-1954)

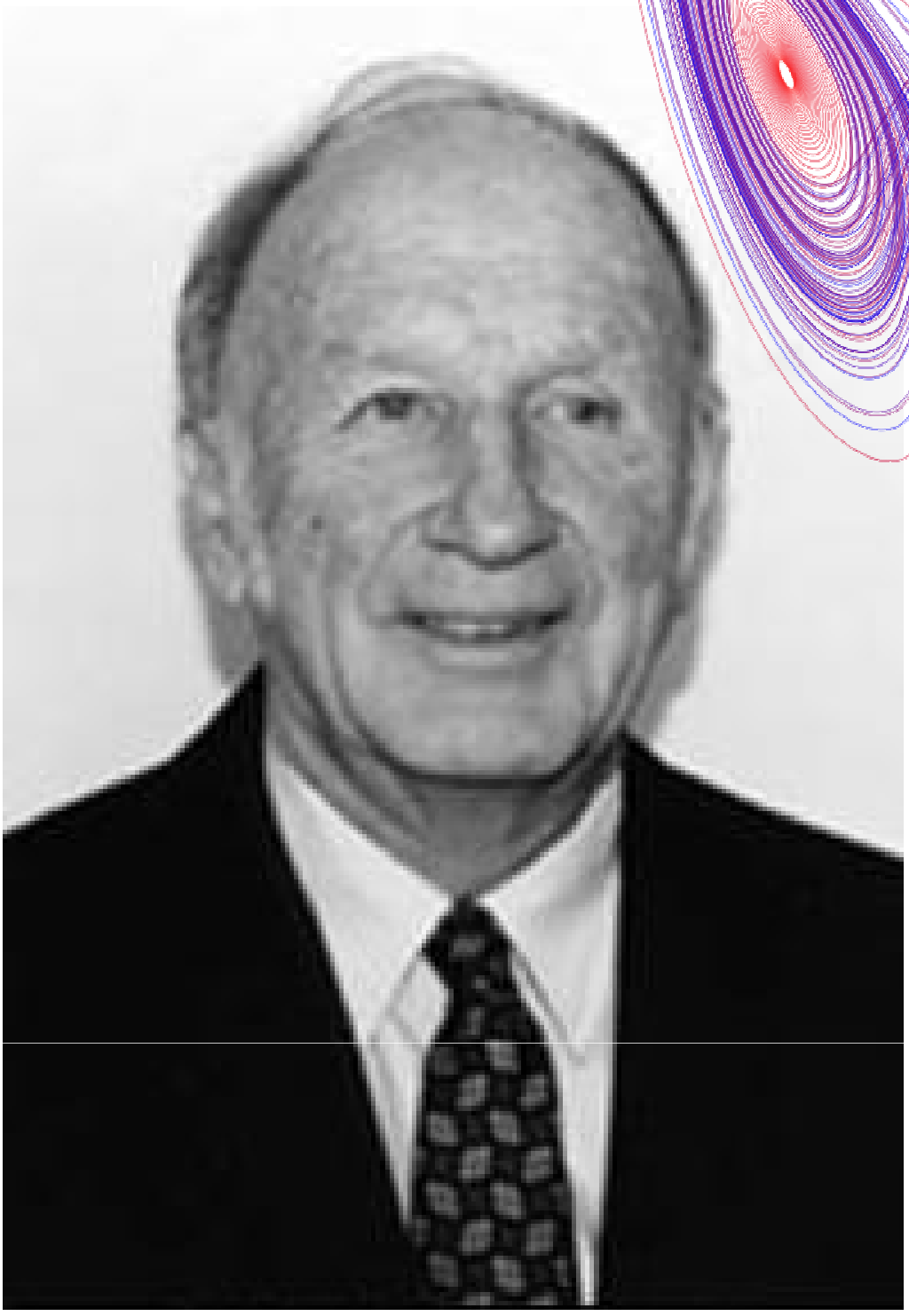
John von Neumann

(1903-1957)

Alan Turing

(1912-1954)

John Tukey
(1915-2000)
Fast Fourier Transform algorithm (with James Cooley)



Edward Norton Lorenz

(1917-2008)

Richard Feynman

(1918-1988)

Andrew Wiles

(1953-)

Grigori Perelman

(1966-)