Photos
Sources: wikipedia.org, history.mcs, and Oberwolfach Photo Collection

Pierre-Simon Laplace 1749-1827 (Beaumont-en-Auge, France).
Astronomy ("Mécanique Céleste", black holes), probability theory, physics.


Augustin Louis Cauchy 1789 - 1857 (Paris, France).
École Polytechnique and then École des Ponts et Chaussées. Worked on diff. eq. with application to physics. Father of real and complex analysis. 789 articles.


Karl Hermann Amandus Schwarz 1843-1921
(Hermsdorf, now Poland).
Studied chemistry in Berlin but Kummer and
Weierstrass persuaded him to change to mathematics. 1864: PhD at the University of
Berlin. Worked in Halle, ETHZ, Göttingen. Main work in complex analysis. Had 20 PhD students.


Joseph-Louis Lagrange 1736-1813 (Turin, Italy).
Learned math. alone. Letter to Euler who was impressed by Lagranges ideas. Main work: calculus of variation, mechanics (vibrating string), astrophysics (3 body problem with Euler), etc.
Citation: "'If I had been rich, I probably would not have devoted myself to mathematics."


Boris Grigorievich Galerkin 1871-1945
(Polotsk, Belarus).
"Galerkin was a consultant in the planning and building of many of the Soviet Union's largest hydrostations".


> Johann Peter Gustav Lejeune Dirichlet 1805 - 1859 (Düren, French Empire (now Germany)).

Only certificate of end of gymnasium, no Abitur (not good at Latin). Went to Paris to study mathematics. Prof. at the University of Berlin (1828-1855, no Habilitation lecture in Latin for 20 y .). Youngest member of the Prussian Academy of Sciences (age 27).
Worked in number theory, modern analysis (concept of function), Fourier series.


Carl Gottfried Neumann 1832-1925
(Königsberg, Germany (now Kaliningrad, Russia)).
Studied physics with his father (prof.). Then worked mostly on electrodynamics. Professor at Halle, Basel, Tübingen, and Leipzig. Also known for the series

$$
\frac{1}{1-x}=1+x+x^{2}+\ldots
$$



Jules Henri Poincaré 1854-1912 (Nancy, France).
Student of Hermite (PhD on ODE). "Last universalist in mathematics" (math., physics, philosophy). Algebra, algebraic geometry, functional analysis, fluid dynamics, relativity, Poincaré conjecture, etc.

# Leonhard Euler 1707 - 1783 (Basel, Switzerland). 

Entered the University at the age of 14. Had Johann Bernoulli as mentor. Worked in almost all areas of mathematics. If all his work would have been printed, this would represent ca. 50 books.
Best mathematician in the world.


John Crank 1916 - 2006 (Hindley, England). During WWII worked on ballistics problems. Main field of research: numerical methods for PDE. Established the John Crank Garden as a retirement gift to Brunel University.


## Phyllis Nicolson 1917 - 1968 (Macclesfield,

 England).She got a Phd in physics in 1946 (Manchester University). During WWII worked on defence-related problems.


# Oliver Heaviside 1850-1925 (Camden Town, England). 

Autodidactic electrical engineer, mathematician, and physicist. Used complex numbers in circuit analysis. Rewrote Maxwell's equations in the form commonly used today. Heaviside's equations helped further the implementation of the telegraph. Fellow of the Royal Society in 1891.


Jean Baptiste Joseph Fourier 1768-1830 (Auxerre, France).
Worked on the heat equation. Was governor of Egypt!


Friedrich Wilhelm Bessel 1784-1846 (Minden, Germany).
Interested in geography, navigation, math. and astronomy: computed better trajectories of Halley's comet, trajectories of 38 stars for 100 years.


Georg Friedrich Bernhard Riemann 1826-1866 (Breselenz, Hanover).
With 20 at Uni. Göttingen: theology and then mathematics (with Gauss). 1851 Phd. Complex numbers, Riemann surfaces, trigonometric series, zeta function.


Henri Léon Lebesgue 1875-1941 (Beauvais, France).
Lebesgue integral. Topology. Fourier series. During WWI had argument with another mathematician Borel (Dept. de la défense).


