## Photos

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

## Pierre-Simon Laplace 1749-1827

(Beaumont-en-Auge, France).
Astronomy ("Mécanique Céleste", black holes), probability theory, physics.


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


Sergei Lvovich Sobolev 1908 - 1989 (St Petersburg, Russia).
Theory of DE. Functional analysis. But also numerical analysis: interpolation.


Hermann Minkowski 1864-1909 (Aleksotas, now in Lithuania).
Number theory. Mathematical physics. Theory of relativity. Former student at ETHZ: A.

Einstein. Minkowski space.


Otto Hölder 1859 - 1937 (Stuttgart, Germany). PhD from University of Tübingen. Work at the University of Leipzig from 1899. Classification of simple groups of order up to 200. Signed the Vow of allegiance of the Professors of the German Universities and High-Schools to Adolf Hitler ;-(


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.

Thomas Hakon Grönwall 1877 - 1932 (Dylta bruk, Sweden).
PhD from Uppsala University in 1898. Worked in Germany and emigrate to the US in 1904. Mostly worked in analysis and later physics.


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".


Walther Ritz 1878 - 1909 (Sion, Switzerland). Theoretical physicist. Argument with Einstein (fellow student of him at ETHZ).


Siméon Denis Poisson 1781 - 1840 (Pithiviers, France).
Nobleman. Had to study medicine. But he was better in math. (Teacher: Laplace, Lagrange). Work on ODE (pendulum), PDE (wave eq.), probability (Recherches sur la probabilité des jugements en matière criminelle et matière civile). Published more than 300 articles.


Peter Lax 1926 - 20?? (Budapest, Hungary).
Wife did a PhD with Courant. Won Abel Price. Theory and application of PDE.


Arthur Milgram 1912 - 1961 (Philadelphia, USA).
"Milgram's office, the door always open, was a magnet for the PDE students and faculty, a place to learn and to test new ideas"'. Contributions in: functional analysis, combinatorics, differential geometry, topology, PDE, and Galois theory.

David Hilbert 1862 - 1943 (Königsberg, now Kaliningrad, Russia).
One of the most influential mathematicians of the 19-20 centuries. Presented 23 problems in 1900. Important contributions in most fields of mathematics.


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."


> 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

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



# 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.


George Green 1793 - 1841 (Nottingham, England).
His father was a baker, his mother a mathematician. He studied mathematics on his own, while working for his father. Famous work
on potential function, Green's theorem and Green's functions in 1828. Became an undergraduate at Cambridge at the age of 40 .


