

Photos

Fredrik Carl Mulertz Störmer 1874 – 1957
(Skien, Norway).

PhD. at the University of Christiania (=Oslo) in 1898. First publication before his PhD. Postdoc in Paris (with Picard, Poincaré, Darboux, Jordan). Prof. at the University of Oslo (1903-1946). Pictures of Polar light -> numerical scheme.



Loup Verlet 1931– (Paris).

Psychoanalyst and physicist. His numerical scheme was designed in 1967. Afterwards philosopher and writer.



Carl David Tolmé Runge 1856 – 1927 (Bremen).

After 6 weeks literature studies, change for math.+physics. Professors: Max Planck, Weierstrass, Kronecker. Works on differential geometry and numerical analysis. With 70 years old, could still do a handstand.



Martin Wilhelm Kutta 1867 – 1944 (Pitschen,
Poland).

Studied mathe., language, music and art
(München). The Runge-Kutta scheme comes
from his dissertation. Works on streamlines,
glacier and history of mathe.



John Butcher 1933– (Auckland, New Zealand).
Trees. General linear methods (gen. of RK,
multi-step methods).



Ernst Hairer 1949– (Tirol, Austria).

B-series. ODE. Geometric numerical integration. Present in the World record Guinness book (RK of order 10 with $s = 17$).



Gerhard Wanner 1942— (Tirol, Austria).

B-series. ODE. Geometric numerical integration. Book about the life of Euler.



Sir Isaac Newton 1643 – 1727 (Woolsthorpe,
Great-Britain).

Trinity College in Cambridge. Studies
philosophy and mechanics. Professor in
Cambridge with 27 years old. Main work: ODE,
integral eq., optics, mechanics, gravitation law,
etc. Goes into politics (\$\$\$\$:-)).



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."



Sir William Rowan Hamilton 1805 – 1865
(Dublin, Ireland).

Speaks Latin, Greek, Hebrew with 5 years old.
Reads works from Newton, Laplace (1 error)
with 15. Was professor with 22. Main work:
mechanics, quaternions, astronomy, etc.



Jules Henri Poincaré 1854 – 1912 (Nancy,
France).

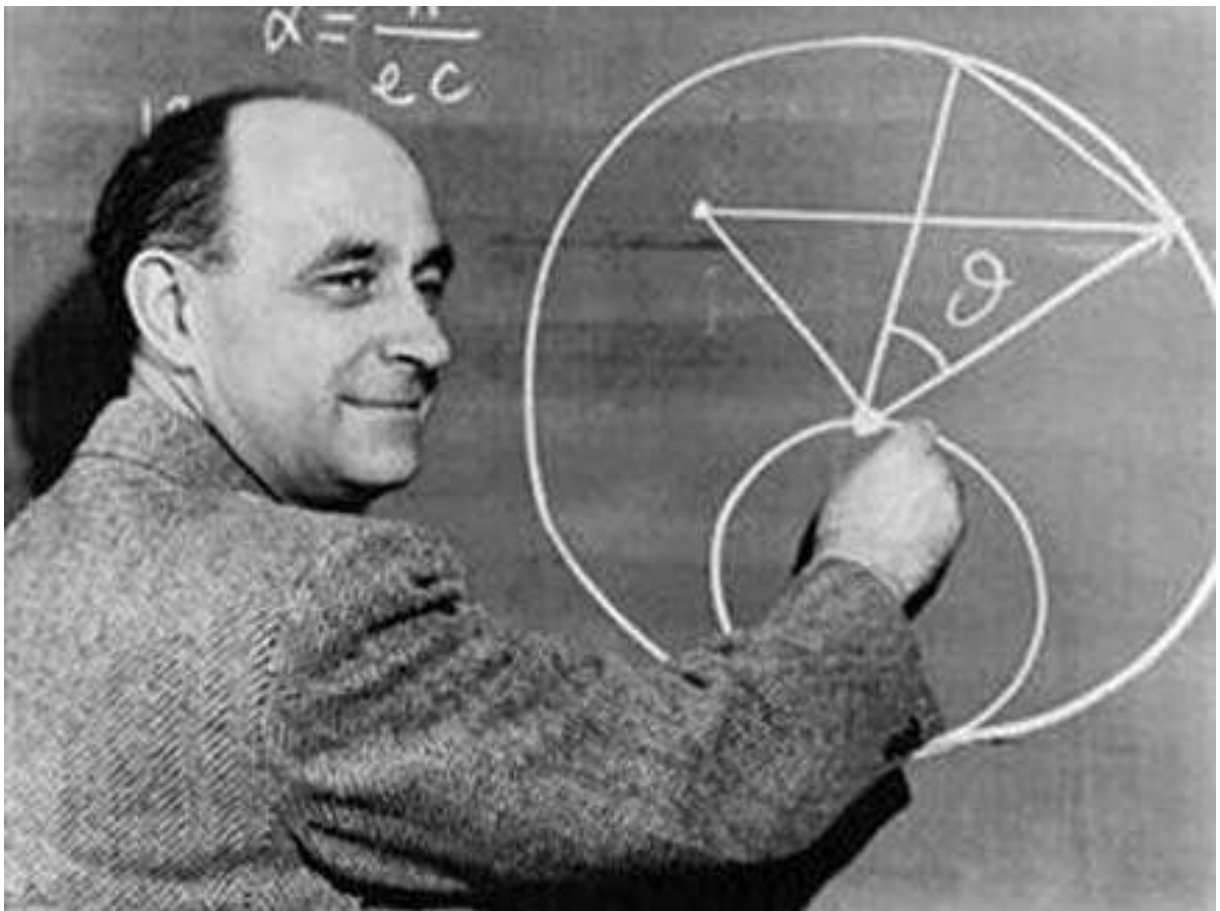
Student from Hermite (PhD. on ODE). “Last
universalist in mathematics” (math., physics,
philosophy). Algebra, algebraic geometry,
functional analysis, fluid dynamics, relativity,
Poincaré conjecture, etc.



Enrico Fermi 1901 – 1954 (Rome, Italy).

1918 Scuola Normale Superiore in Pisa. 1923 Göttingen. 1926 Chair of theoretical physics at the University of Rome. 1938 Nobel Prize.

Because his wife was Jewish, they had to go to the US (Columbia University). Then worked in Los Alamos (build bomb, works with Pasta, Ulam).



John Pasta 1918 – 1984 (NYC).

Was a New York City police officer from 1941 to 1942. PhD in theoretical physics in 1951 and just after started to work at Los Alamos.

Main projects: Design of a computer specialised in calculations around weapons with Metropolis. FPU problem. Computers.



Stanislaw Marcin Ulam 1909 – 1984 (Lemberg, Poland, Austrian Empire).

1933 PhD under Banach supervision. 1940 Ass. Prof. at the University of Wisconsin. Then worked at Los Alamos (hydrogen bomb).

Main works: Explain how to initiate fusion in the hydrogen bomb. Monte-Carlo method (finance, probability, sampling). Set theory. Measure theory. Ergodic theory. Group theory. Topology. Mathematical physics.

