Roland Eötvös

EÖTVÖS

1848 175 2023

Eötvös in his room at the University (Budapest)

The Scientist

„ Prince of Physics" *(Einstein, 1919)*, „Father of Geophysical Prospecting" *(Rankine, 1948)*. He was nominated three times for the Nobel prize in physics *(1911, 1914, 1917)*

Significance of His Research

- The Eötvös rule in capillarity has of equal importance as the universal gas laws.
- By demonstrating the gravity of gravitational and inertial masses, with extremely high precision (10^{-9}), Eötvös became one of the giants in gravitational physics.
- In the first half of the 20th century the largest oil and gas fields were discovered by using his torsion balance.

Scientific Concepts & Terms Named after Eötvös

Eötvös rule, Eötvös constant, Eötvös number *(Capillarity)*; Eötvös experiment, Eötvös parameter *(Weak Equivalence Principle)*; Eötvös torsion balance *(Laboratory and field instruments)*; Eötvös effect and Eötvös correction *(Gravitation on rotating planet)*; Eötvös tensor *(Geodesy)*; Eötvös law of magnetism *(Geophysics)*. The physical unit 1 eötvös = 1E = 10^{-9} s^{-2} is also named after him.

Family Background

The baronial title was given to his great-great grandfather in 1768 by Empress Maria Theresa. His father József Eötvös *(1813–1871)* was jurist, famous writer, minister, and Academy president. His literary style, patrio-tism, devotion and humanism are probably due to his father.

Homo Publicus

Following his father, Roland Eötvös was President of the Hungarian Academy of Sciences *(1889–1905)* and Minister of Religion and Public Education *(1894–1895)*. He was also Rector of the University of Budapest *(1891–1892)*, founder of scientific and sport organisations, and a supporter of young talents. He was a sportsman, among others a mountaineer.

Nature Forms Named after Eötvös

Lorándite *(mineral)*, Eötvös peak, Eötvös tower and Via Eötvös *(Dolomites)*; Eötvös út *(Banska Štiavnica)*, Eötvös caves *(Aggtelek and Crăciunești)*; Eötvös crater *(on the Moon)*; 12301 Eötvös *(asteroid)*.

An Exemplary Life

Roland Eötvös devoted his whole life to selfless and deep relationships. At the same time, he despised selfishness, narrow mindedness and superficiality.

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United Nations Educational, Scientific and Cultural Organization

100th anniversary of Roland Eötvös (1848-1919), physicist, geophysicist, and innovator of higher education
Commemorated in association with UNESCO

National Research, Development and Innovation Office Hungary

PROJECT FINANCED FROM THE NRDI FUND