

# ROLAND EÖTVÖS LORÁND

1848–1919



## *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 20<sup>th</sup> 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  $1 \text{ eötvös} = 1\text{E} = 10^{-9} \text{ s}^{-2}$  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, patriotism, 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 Črčiunești*); 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.

# 1EÖTVÖS

[www.eotvos100.hu](http://www.eotvos100.hu)

Eötvös in his room at the University (Budapest)



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



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