GENEALOGY DATABASE ENTRY

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Helmholtz, Hermann Ludwig Ferdinand von 1821 - 1894

DEGREE: MD DATE: 1842 PLACE: Berlin

TEACHER/RESEARCH ADVISOR: Müller

formulated concept of conservation of energy; first to measure speed of nerve impulses; invented the opthalmoscope; investigated physiology of sight and hearing, esp. color blindness and the theory of color vision, acoustics, the role of the cochlea as a resonant sound detector, and the importance of overtones, discordances, and beats in the quality of musical sounds; first to solve mathematics of vortexes; predicted existence of the electron; calculated the age of the solar system assuming (incorrectly) that gravitational contraction was the source of the sun's energy; wrote papers on congruence of objects in non-Euclidean geometries; anticipated Pasteur in showing that microorganisms are responsible for fermentation.

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