

Königsberger, Leo | Encyclopedia.com

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(*b* Posen, Germany [now Poznań, Poland], 15 October 1837; *d.* Heidelberg, Germany, 15 December 1921)

mathematics.

The son of a wealthy merchant, Königsberger began to study mathematics and physics at the University of Berlin in 1857. After graduating in 1860, he taught mathematics and physics to the Berlin cadet corps from 1861 to 1864. In the latter year his academic career commenced at the University of Greifswald, as an associate professor; in 1869 he became a full professor at Heidelberg. After teaching at the Technische Hochschule in Dresden (1875-1877) and at the University of Vienna (1875-1884), he returned in 1884 to Heidelberg, where he remained until his death. He retired in 1914.

Königsberger was one of the most famous mathematicians of his time, member of many academies, and universally respected. He contributed to several fields of mathematics, most notably to analysis and analytical mechanics.

Königsberger's mathematical work was early influenced by his teacher Weierstrass. In 1917 he published a historically important account of Weierstrass' first lecture on elliptic functions, which he had heard in 1857, during his first semester at Berlin. Königsberger also was extremely skillful in treating material from the Riemannian point of view, as can be seen from his textbooks on elliptic functions (1874) and hyperelliptic integrals (1878). In addition he worked intensively on the theory of differential equations. This subject, which grew out of function theory, is associated especially with Lazarus Fuchs, with whom Königsberger was friendly during his youth. Königsberger was the first to treat not merely one differential equation, but an entire system of such equations in complex variables.

In Heidelberg, Königsberger maintained close friendships with the chemist Bunsen and the physicists Kirchhoff and Helmholtz. These contacts undoubtedly provided the stimulation both for his series of works on the differential equations of analytical mechanics and his biography of Helmholtz (1902). The latter and the biographical *Festschrift* for C. G. J. Jacobi (1904) have proved to be his best-known works, despite his many other publications.

BIBLIOGRAPHY

Königsberger's writings include *Vorlesungen über elliptische Funktionen* (Leipzig, 1874); *Vorlesungen über die Theorie der hyperelliptischen Integrale* (Leipzig, 1878); *Lehrbuch der Theorie der Differentialgleichungen mit einer unabhängigen Veränderlichen* (Leipzig, 1889); *H. v. Helmholtz*, 2 vols. (Brunswick, 1902); C. G. J. Jacobi, *Festschrift zur 100. Wiederkehr seines Geburtstages* (Leipzig, 1904); "Weierstrass' erste Vorlesung aus der Theorie der elliptischen Funktionen," in *Jahresberichte der Mathematikervereinigungen*, **25** (1917), 393-424; and *Mein Leben* (Heidelberg, 1919).

Werner Burau