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(*b*. Pécs, Hungary, 9 February 1880; *d*. Budapest, Hungary, 15 October 1959)

mathematics.

Fejér became interested in mathematics while in the higher grades of the Gymnasium, and in 1897 he won a prize in one of the first mathematical competitions held in Hungary. From 1897 to 1902 he studied mathematics and physics at the universities of Budapest and Berlin. During the academic year 1899–1900 H. A. Schwarz directed his attention, through a suggestion made by C. Neumann concerning Dirichlet's problem, to the theory of Fourier series. Later in 1900 Fejér published, in the *Comptes rendus* of the Paris Academy, the fundamental summation theorem that bears his name and was also the basis of his doctoral dissertation at Budapest (1902). After participating in mathematical seminars in Göttingen and Paris, he taught at the University of Budapest from 1902 to 1905 and at that of Kolozsvár (now Cluj, Rumania) from 1905 to 1911. He was professor of higher analysis at the University of Budapest from 1911 until his death. Collaborating with F. and M. Riesz, A. Haar, G. Pólya, G. Szegö, O. Szász, and other mathematicians of international rank, Fejér became the head of the most successful Hungarian school of analysis.

Fejér was a vice-chairman of the International Congress of Mathematicians held at Cambridge in 1912. In 1933 he and Niels Bohr, two of the four European scientists invited to the Chicago World's Fair, were awarded honorary doctorates by Brown University. Fejér was elected to the Hungarian Academy of Sciences in 1908 and was also a member of several foreign academies and scientific societies. Besides receiving a number of state and academic prizes for his work, he was honorary chairman of the Bolyai Mathematical Society from its founding and the holder of an honorary doctorate from Eötvös University, Budapest (1950).

Fejér's main works deal with harmonic analysis. His classic theorem on (C, 1) summability of trigonometric Fourier series (1900) not only gave a new direction to the theory of orthogonal expansions but also, through significant applications, became a starting point for the modern general theory of divergent series and singular integrals. Through a Tauberian theorem of G. H. Hardy's the convergence theory of Fourier series was considerably affected by Fejér's theorem as well; it is closely connected with Weierstrass' approximation theorems and with the more advanced theory of power series and harmonics (potential theory), and makes possible a number of analogues for related series, such as Laplace series. In 1910 Fejér found a new method of investigating the singularities of Fourier series that was suitable for a unified discussion of various types of divergence phenomena. These results were continued and generalized in several directions by Fejér himself, by Lebesgue (1905), by M. Riesz and S. Chapman (1909–1911), by Hardy and Littlewood (1913), by T. Carleman (1921), and others.

Fejér's contributions to approximation theory and the constructive theory of functions are of great importance. In 1918 he solved Runge's problem on complex Lagrange interpolation relating to an arbitrary Jordan curve, and in the following decades he enriched the field of real Lagrange and Hermite interpolation and mechanical quadrature by introducing new procedures. His work in mechanical quadrature produced wide response in the literature (Akhiezer, Erdös, Grünwald, Natanson, Pólya, J. A. Shohat, Szegö, and Turán, among others). As for Fejér's results in complex analysis, particular stress may still be laid on a joint paper with Carathéodory (1907), of which the basic ideas influenced considerably the literature on entire functions, and a new standard proof of the fundamental theorem of conformal mappings, found in 1922 with F. Riesz.

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MiklÓs MikolÁs