PINCHERLE, SALVATORE

(*b.* Trieste, Austria [now Italy], 11 March 1853; *d.* Bologna, Italy, 10 July 1936)

Mathematics.

Born of a Jewish business family, Pincherle completed his preuniversity studies in Marseilles, where his family had migrated. The unusually sophisticated teaching of science there seems to have been a decisive factor in diverting his interest from the humanities to mathematics; and by 1869, when he entered the University of Pisa, the decision to study mathematics had already matured. His teachers at Pisa included Betti and Dini; Pincherle was greatly affected by both of them. After graduating in 1874, Pincherle became a teacher at a liceo in Pavia. A scholarship for study abroad enabled him to spend the academic year 1877–1878 in Berlin, where he met Weierstrass, who influenced all his subsequent work. In 1880 Pincherle became professor of infinitesimal analysis at the University of Palermo. He remained there only a few months, having been appointed to a chair at the University of Bologna. He retired in 1928.

Pincherle greatly improved the level of mathematics at the University of Bologna, which had badly deteriorated during the final years of papal domination. The university later acknowledged his contribution by naming the mathematics institute for him during his lifetime. In Bologna, Pincherle also founded (1922) the Italian Mathematical Union, of which he was the first president. At the Third International Congress of Mathematicians, held at Bologna in 1928, of which he was president, Pincherle restored the truly international character of international mathematical congresses by reopening participation to German and other mathematicians who had been excluded since World War I.

Pincherle’s contributions to mathematics were mainly in the field of functional analysis, of which he was one of the principal founders,

together with Volterra. Remaining faithful to the ideas of Weierstrass, he did not take the topological approach that later proved to be the most successful, but tried to start from a series of powers of the *D* derivation symbol. Although his efforts did not prove very fruitful, he was able to study in depth the Laplace transformation, iteration problems, and series of generalized factors. He was the author of several textbooks, notably for secondary schools, at which he had had direct practical experience.

Pincherle was a member of the Accademia Nazionale dei Lincei and the Bayerische Akademie der Wissenschaften, which, despite the rise of Nazism, sent him a warm message on his eightieth birthday in 1934. In 1954 the city of Trieste held a solemn celebration of the centenary of his birth.

BIBLIOGRAPHY

There is an accurate bibliography of Pincherle's writings from 1874 to 1936, with 245 references, by Ettore Bortolotti, in *Bollettino dell'Unione matematica italiana*, **16** (1937), 37–60. On his life and work, see the notices Ugo by Amaldi, in *Annali di matematica pura ed applicata*, 4th ser., **17** (1938), 1–21; and Leonida Tonelli, in *Annali della Scuola normale superiore*, 2nd ser., **6** (1937), 1–10; and F. G. Tricomi, *Salvatore Pincherle nel centenario della nascità*, Pubblicazioni della Facoltà di scienze e d'ingegneria, Università di Trieste, ser. A, **60** (1954).

F. G. Tricomi