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(b. Fällanden, near Zurich, Switzerland, 7 July 1816; d. Zurich, 6 December 1893)

astronomy, history of science.

Wolf, the son of Johannes Wolf, a minister, and Regula Gossweiler, came from an old Zurich family, the Windeggen-Wolfs, who had been citizens of that city since the fourteenth century. He was educated at the Zurich Industrieschule and at the newly founded university, where his teachers included K. H. Gräffe and J. L. Raabe. He continued his studies at Vienna (1836–1838) under J. J. von Littrow and J. A. von Ettingshausen, and at Berlin (1838) under Encke, Dirichlet, and Steiner. In 1839 Wolf went to Bern to teach mathematics and physics, and from 1844 to 1855 he also was professor of astronomy at the university. In the latter year he accepted a double appointment at Zurich as professor of astronomy at the Eidgenössische Technische Hochschule and the university. Through his efforts an observatory was constructed at Zurich and opened in 1864.

Wolf's most important achievement was the reliable determination of the lengths of sunspot periods and of their relationship to the variation in terrestrial magnetism. After Schwabe announced that he had detected a period of about ten years, Edward Sabine, Alfred Gautier, and Wolf discovered, simultaneously and independently of each other, that this period paralleled the variations in the earth's magnetic elements. By exploiting older data, Wolf gathered enough solar observations to establish, in 1852, a mean value of 11.1 years for the duration of a period. He also determined the epochs of all the maxima and minima from 1610 on; and until his death he continued to publish regular reports on his determinations of the relative numbers of the sunspots (see his *Geschichte der Astronomie*, secs. 188, 235).

Wolf also made a significant contribution to the study of the history of science. His works in this field are a rich source of historical data, and by virtue of his astonishingly wide-ranging studies they are exceptionally reliable. Moreover, they are very concise. Among his scholarly achievements was the discovery that the correspondence of Johann I Bernoulli, augmented by that of the younger Bernoullis, had been sold shortly before 1800, in part to the Stockholm Academy and in part to the prince of Gotha. As a result, O. Spiess was able to make the correspondence accessible to scholars. Wolf's own correspondence was stored with his other papers at the Zurich observatory and, unfortunately, his successor, lacking space, disposed of it (see Spiess's preface to *Der Briefwechsel von Johann Bernoulli*, 35, n. 1).

Wolf founded the *Vierteljahrsschrift der Naturforschenden Gesellschaft in Zürich* in 1856 and served as its editor until his death. Upon the establishment of the Zurich Polytechnikum he was named head librarian; during his tenure he assembled a valuable collection of early printed books on astronomy, mathematics, and other branches of science.

BIBLIOGRAPHY

I. Original Works. Wolf's writings include "Über den gelehrten Briefwechsel der Bernoulli," in *Mitteilungen der Naturforschenden Gesellschaft in Bern*, no. **109** (1848), 1–7; *Handbuch der Mathematik, Physik, Geodäsie und Astronomie*, 2 vols. (Zurich, 1869–1872); "Die Correspondenz von Johannes Bernoulli," in *Vierteljahrsschrift der Naturforschenden Gesellschaft in Zürich*, **21** (1876), 384–386; *Geschichte der Astronomie* (Munich, 1877), vol. XVI of *Geschichte der Wissenschaften in Deutschland*; and *Handbuch der Astronomie, ihre Geschichte und Literatur*, 2 vols. (Zurich, 1890–1893).

The Zurich observatory has Wolf's journal for 1816–1841, which consists of 141 MS pages. Wolf's contributions to *Biographien zur Kulturgeschichte der Schweiz*, 4 vols. (Zurich, 1858–1862), were continued in 475 articles subsequently published in *Vierteljahrsschrift der Naturforschenden Gesellschaft in Zürich*, **6–39** (1861–1894).

II. Secondary Literature. See Heinz Balmer, "Rudolf Wolf und seine Briefsammlung," in *Librarium*, **8**, no. **2** (1965), 95–105; and Alvin Jaeggli, "Die Berufung des Astronomen Joh. Rudolf Wolf nach Zürich 1855," Eidgenössische Technische Hochschule (Zurich), Bibliothek, Schriftenreihe no. **11** (1968).

Obituaries are collected in *Reden, gehalten bei den Trauerfeierlichkeiten für Herrn Dr. J. R. Wolf* (Zurich, 1894). A list of additional obituaries, some with bibliography and portrait, is in *Vierteljahrsschrift der Naturforschenden Gesellschaft in Zürich*, **46** (1901), 333.

See also *Der Briefwechsel von Johann Bernoulli*, O. Spiess, ed., I (Basel, 1955), foreword, 35, n. 1.

