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Friedrich Gondolatsch (1904–2003)

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**On Thursday, November 13, 2003,
Professor Dr. Friedrich Gondolatsch
died in Heidelberg at the age of 99.**

We had hoped that in June 2004 he would be able to celebrate his 100th birthday with us. Unfortunately, fate denied this to us all.

Friedrich Peter Max Gondolatsch was born on June 3, 1904 in Silesia in the city of Görlitz. His father was a high school teacher there. In 1913, after three years of elementary school, he enrolled in the public school in Görlitz and graduated in 1923.

Gondolatsch began studying astronomy in 1923 at the University of Leipzig. He then studied for a year in Munich at the university and then at the technical university. In 1925 he moved to the Friedrich-Wilhelms-Universität in Berlin, where he earned his Ph.D. degree.

His doctoral supervisor was Prof. August Kopff, the director of the Astronomical Calculation Institute (Astronomisches Rechen-Institut; ARI) in Berlin-Dahlem. The topic of his doctoral thesis was: “A method for spatial orbit determination of moving grains tail matter (with application to Halley's grains).” He continued earlier work by Kopff on this topic. Gondolatsch came to the important conclusion that there was a particularly strong compression in the tail of Halley's comet, which had formed in June 1910 that did not move in the plane of the orbit of the comet's nucleus, as would be expected if forces emanated purely radially from the Sun.

Even before completing his doctorate, Gondolatsch was hired at ARI on May 1, 1927, as a scientific “unskilled worker” and was promoted in 1928 to an external planning assistant. He remained at ARI throughout his career. In 1932 he became a planning assistant, then in 1939 as an observer, and in 1956 as a lead observer. For many years until his retirement in 1969 he was Director of the Institute. During the Second World War Gondolatsch had unusual experience for a scientifically working astronomer: from

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1942 to 1945 he was “Government Councilor at the Deutsche Seewarte in Hamburg, assigned to the Astronomical Calculation Institute”. There exist photos of the otherwise extremely peaceable Gondolatsch in naval uniform. In 1944, Gondolatsch witnessed the relocation of ARI, which was subordinate to the Navy during the war, from Berlin to Sermuth in Saxony, and then in June 1945 from Sermuth to Heidelberg.

After his doctoral thesis on the orbits of comet tails, Gondolatsch’s scientific work concentrated heavily on the tasks assigned to him by ARI: from 1927 to 1932 he took part in the ephemeris work for the Berlin Astronomical Yearbook. From 1932 to 1940 he was busy with the orbital calculation and the ephemeris of minor planets. It was particularly noteworthy that in 1937 he calculated the first orbit of the asteroid Hermes (“Object Reinmuth” 1937 UB). At that time Hermes came within 0.005 astronomical units of the Earth, closer than all other small planets known at the time. Hermes was rediscovered in 2003 and given a very high number (69230). From 1940 onwards, Gondolatsch was again mainly active in the Berlin Astronomical Yearbook. In 1945 he took over the management of the yearbook department of the Institute in Heidelberg, which also published the “Astronomical-Geodetic Yearbook.” After the two yearbooks were discontinued in 1957, Gondolatsch edited the publication “Apparent Places of Fundamental Stars” until his retirement in 1969.

The scientific interests of Gondolatsch went beyond celestial mechanics and ephemeris calculations, especially in the area of the kinematics and dynamics of the stars of our Milky Way.

Early in 1931 he published (with L. Hufnagel) a work on the velocity distribution of faint stars, which included the velocity ellipsoid and the vertex deviation of over 10,000 stars with apparent brightnesses between 9th and 14th magnitude. The highlight of his work in this field is undoubtedly his co-authorship of the “Textbook of Stellar Statistics” published by E. von der Pahlen (Potsdam) in 1937 (Verlag J. A. Barth, Leipzig). Gondolatsch wrote three important chapters in this book: “The positions and movements of the stars”; “Spatial distribution of the stars of individual spectral classes”; and “The movement of the Sun in relation to the stars and the velocity distribution of the stars”. This book has long been a standard work in galactic research. I myself have studied it very carefully to great benefit — despite (or perhaps precisely because of) its imposing length of 934 pages.

Another important work by Gondolatsch was his post-doctoral thesis, published in *Astronomische Nachrichten* in 1939, on the “Determination of the location, proper

motion and mass ratio of the binary star alpha Centauri from meridian observations 1829–1910” [\[1\]](#).

Gondolatsch was an avid and enthusiastic teacher. In 1939 he completed his habilitation at the Faculty of Mathematics and Natural Sciences at Berlin University, earning his Dr. phil. habil. In 1943, Gondolatsch was appointed to a lectureship in astronomy at Berlin University. After 1945 he taught astronomy as a lecturer at the University of Heidelberg, where he was named adjunct professor in 1956. He was particularly attracted to the Technical University of Karlsruhe, where he had been an adjunct teaching professor since the summer semester of 1950, because there he was able to bring his astronomical knowledge to full advantage. Beyond teaching, Gondolatsch was also active in public outreach and education. He wrote many articles for the magazine “Sterne und Weltraum.” The high point of his work in this area were his text books: “Astronomy. Volume 1: The sun and its planets,” and “Volume 2: Fixed stars and star systems” (Klett publishing house, Stuttgart, 1978/1979), co-authored with G. Groschopf and O. Zimmermann) and “Astronomie Grundkurs” (Klett-Verlag, Stuttgart, co-authored with S. Steinacker and O. Zimmermann). Gondolatsch worked in many other areas related to astronomy education, e.g., serving on the education committee of the Astronomischen Gesellschaft (AG) and in advisory bodies of the Stuttgart Planetarium.

Gondolatsch was accepted into the AG at its conference in Budapest in 1930 and was an active member for 73 years. His picture was added to the AG’s directory in 1931. From 1953 to 1959, Gondolatsch was an editor for the AG, publishing many of the organization’s announcements.

I think Gondolatsch was mostly a happy person, although he was not spared several strokes of bad luck. During the Second World War, his Berlin apartment was destroyed by bombs. During the war he also had to move from Berlin to the small town of Sermuth, where the ARI had been relocated. Immediately after the end of the war, much was lost when moving to Heidelberg. It was certainly extremely disappointing for Gondolatsch that he was passed over for the position of director of the ARI in 1954, even though the outgoing director, Professor August Kopff, had emphatically advocated Gondolatsch as his successor. The worst stroke of fate for Gondolatsch was the death of his wife Margarethe née Fabricius, who died on April 10, 1964 after a happy marriage of more than 26 years.

Gondolatsch will be remembered by everyone who knew him as a particularly friendly and helpful person. I met him in 1956. Back then, I was a 17-year-old student from

Berlin who wanted to be a guest at the AG conference in Hanover. Gondolatsch, as the current secretary of the AG, gave me his permission, for which I was extremely grateful. But also later, when I joined the ARI as a young scientist in 1963, and in 1985, when I took over the management of the ARI, Gondolatsch was extremely helpful and always gave me good advice. I am therefore very grateful to Professor Gondolatsch in every respect. He also was a very rich source of information on the history of the ARI, since he had belonged to the ARI himself for so many decades.

In the last few years of his life in particular, everyone especially admired Gondolatsch's enthusiasm. He kept his lovable sense of humor and sociability to the very end. We can all envy him for having kept such a great attitude towards life, despite certain physical complaints as he grew older.

Astronomy has lost a highly esteemed scientist, the University of Heidelberg has lost a popular university professor, ARI has lost a valuable and loyal colleague and, especially, the world has lost a great human being. We deeply mourn Professor Gondolatsch's passing.

*Text and photos used with permission, translated from [the original article](#) by Roland Wielen in *Mitteilungen der Astronomischen Gesellschaft* [2].*

Citations

1. Gondolatsch, F. (1939). Bestimmung von Ort, Eigenbewegung und Massenverhältnis des Doppelsterns Alpha Centauri aus Meridianbeobachtungen 1829 - 1910. *Astronomische Nachrichten*, 268, 133–152.
<https://doi.org/10.1002/asna.19392680902> ↵
2. Friedrich Gondolatsch. (2004). *Mitteilungen Der Astronomischen Gesellschaft Hamburg*, 87, 5. ↵