

## **DIETMAR LINKERT (1942-2009)**

Dietmar Linkert died after a severe illness on March 18, 2009 at his home in Schatthausen, Germany.

Dietmar Linkert worked for 40 years (1967-2007) as electrical engineer at the Max-Planck-Institute for Nuclear Physics in Heidelberg, Germany. Only too short he could enjoy his well-deserved retirement; the latter part of which was marked by his struggle against pancreas cancer.

Dietmar was Principal Engineer for space instruments that were sent to the far regions of the planetary system that made exciting discoveries. His friends and colleagues around the world appreciated his experience and sought his professional advice.



Dietmar got his education at the technical college in Sindelfingen and received his Diploma in Electrical Engineering at the technical college in Berlin. In 1967 he started his career as young engineer in the Cosmo-Chemistry department of the Heidelberg Max-Planck-Institute. He participated in the development of the first-generation space instruments of that institute. The instruments were mass spectrometers and dust collectors for sounding rockets, and dust detectors for the HEOS-2 satellite, and the Helios spaceprobe. The HEOS dust detector measured dust in the Earth-Moon system. The Helios multi-sensor dust detector analyzed interplanetary dust from Earth's orbit to inside Mercury's orbits. Dietmar's masterpiece was the development and manufacturing as Principal Engineer of the neutral mass spectrometer for NASA's Pioneer Venus mission that was launched in 1978. During descent into Venus' atmosphere the instrument measured for the first time the composition of Venus' high atmosphere between 500 and 130 km height.

In 1977 Dietmar became leader of the space electronics lab at the Max-Planck-Institute. He gathered a small group of electronics engineers and technicians, who subsequently under his leadership conceived, developed, manufactured, tested and operated the highly successful dust analyzers of the Galileo, Ulysses, and Cassini missions. Galileo was launched in 1989 towards Jupiter and became the first manmade Jovian satellite which during its 8 year long orbital tour discovered dust atmospheres around the Galilean satellites and analyzed the interaction of the Jovian magnetic field with nanometer sized dust grains that were ejected by the volcanoes on Jupiter's moon Io. The Ulysses mission was launched in 1990 and is orbiting the sun in a plane almost perpendicular to the planet's orbital plane, thereby investigating heliospheric phenomena including interplanetary dust. The biggest discovery was the detection of grains that penetrate the solar system from interstellar space - true star dust that was for the first time analyzed by manmade instruments. Cassini was launched in 1997 and is orbiting Saturn since 2004. The cosmic dust analyzer on board characterizes Saturn's extended dust rings and monitors the ice fountains at Saturn's moon Enceladus.

In the last years Dietmar and his group focused on the development of advanced dust instrumentation that should revolutionize future dust research. His lifework and his space instruments are a memorial for a modest man, a good friend, and an exceptional engineer. He leaves his wife, two children, and two grandchildren. Condolences can be sent to Dietmar's widow, Gudrun Linkert, at Binsenwiese 5, D-69168 Wiesloch-Schatthausen, Germany.

Eberhard Grün