

# OBITUARY

LUIGI GERARDO NAPOLITANO (1928–1991)

Luigi G. Napolitano, one of the founders of AIMETA and until 1990 a Member of the Advisory Board of *Meccanica*, passed away unexpectedly on July 23, 1991. He died last year while representing the European Space Agency at the Space-Station Users Panel, which was held in Estes Park, Colorado, USA.

Born in Naples on June 2, 1928, Luigi Napolitano graduated from the University of Naples in 1951 with a degree in Mechanical Engineering. Napolitano wrote his thesis under the supervision of Umberto Nobile, who strongly influenced this promising young student in the direction of aerospace science. In 1953, Napolitano earned his Doctoral degree in Aerospace Engineering from the University of Rome; in 1955, he earned a Ph.D. in Mechanical Engineering from the Polytechnic University of Brooklyn.

In 1960, Luigi Napolitano was made full Professor at the University of Naples. Upon the retirement of Nobile, he was appointed Director of the Institute of Aerodynamics. Throughout his academic career, Napolitano held many distinguished appointments: he was professor at the University of California at Berkeley (USA) in 1965; at the Sorbone (Paris) in 1967; at the Ecole National de Mechanique et Aerotechnique (Poitiers) in 1974; Director of the Department of Fluid Mechanics at the CISM(Udine) in the years 1970–74; Member of several committees of the Italian Council of National Research, CNR (Engineering 1972–76, Space Research 1972–78, National Space Plan 1987–88), and of the European Space Agency, ESA.

Among the many pre-eminent positions of Dr. Napolitano held in the international scientific community, he was President of the IAF (for two terms); President of the Fluid Dynamics Panel of the AGARD; founder and President of the European Low Gravity Association; Director of the Acta Astronautica and of the Aerotecnica Missili e Spazio; founder and Director of Earth Oriented Applications of Space Technology (since 1987, named Space Technology) and *Microgravity Quarterly*.

At the time of his death, Professor Napolitano was President of the CIRA (Centro Italiano Ricerche Aerospaziali); of the MARS Center, of the SPACE CAMP; member of the board of Directors of the Italian Space Agency, ASI; and member of the National Academy of Lincei and of the International Academy of Astronautics.

Luigi Napolitano was member of more than 20 national and international associations and committees and editorial advisor to 10 international scientific journals. Dr. Napolitano was author of three books on the subject of fluid dynamics, editor of 26 books in the field of aerospace science, and author of well over 300 scholarly papers. Luigi Napolitano was awarded numerous prizes and nominations.

It is with great difficulty that I attempt to sum up the life and achievements of this truly exceptional man: As a scientist he firmly believed in the rigors of scientific methodology, of expanding the limits of analysis, and of exploring new fields. As a teacher, he was a non-conformist: He was tough and demanding; he was a perfectionist and hated compromises – and he expected as much from his students. Luigi Napolitano was a dedicated professor and was studying and teaching well up until the last hours of his life.

Within the space community, Napolitano was quickly recognized as an anchor man, a reference point – defining and promoting (both within his native Italy and overseas) the “Fourth Mankind Environment”, as he termed Space. Napolitano was a champion of experimentation in the zero-gravity environment of space. It was Napolitano who began the study of surface driven flows in space (which would later grow into the fields of Microgravitational Science and Microgravitational Fluid Dynamics). Dr. Napolitano demonstrated in the famous SL-1 experiment the real existence of the Maragone effect. For his lifelong contributions to science, *Aviation Week and Space Technology* lauded him as the most representative personality in Aerospace for 1985. Napolitano also made fundamental contributions to the study of surface phases and flow regimes. His work in those fields is best symbolized by the Order of Magnitude Analysis (OMA), which is recognized world-wide as Napolitano’s Method.

Always open to new ideas, Luigi Napolitano was also a catalyst behind the Columbus Project and

he devoted much time and energy to the promotion of technology and industry in Italy. He contributed to the foundation of Innovare SpA., a company created to promote the transfer of innovative technologies to industry. One of his ideas was to broaden the MBA program for young managers and administrators by creating a Masters of Technology curriculum; again emphasizing the implications of science and technology to industry.

More than just a scientist, Luigi Napolitano was also a very personal man. He was a lover of music and the arts and held very deep religious convictions. He took special pride in his family. Luigi Napolitano will be missed by all who knew him – family, friends, students, and colleagues. He was an exceptional man.

*Carmine Golia*