

Georges Balmino

FRANCE

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Presently emeritus scientist at GRGS (Groupe de Recherches de Geodesie Spatiale) in the Space Geodesy team of the French space agency (CNES) and of the Observatory Midi-Pyrenees, in Toulouse, France.

After obtaining degrees in mathematics, physics and astronomy at Ecole Normale Superieure and from Paris University, he started his career at the Meudon observatory in 1967, then at the Harvard-Smithsonian observatory in 1968 where he began to develop methods to determine the gravity field of the Earth from satellite and other data - which he later extended to other bodies in the solar system. He got a PhD in 1969 and a State Doctorate in 1973, both from Paris University. He has been the leader of all global gravity field models computed in France (many in cooperation with German scientists, and some with US groups). Around 1975 he started to study and propose new satellite approaches to map the Earth's gravity field, which were later realized in various contexts: CHAMP, GRACE and GOCE, all launched since year 2000. He participated in the data analysis and derivation of gravitational models from these new missions. At the same time, from the middle of the seventies, he was guest or co-investigator on several planetary missions (Viking, Magellan, Mars Observer, Mars Global Surveyor...) for the global study of Mars, the Moon, Venus, and recently the Vesta asteroid. He made research in a large variety of domains: celestial mechanics, planetary rotations, satellite dynamics, shape-gravity relationship of planetary bodies, very high resolution models of the Earth's Bouguer and isostatic gravity fields, as well as numerous topics in applied and numerical mathematics. From 1974 to 1985 he taught in many universities and schools of engineering in France, and also in other countries (Brazil, China, USSR). Besides his managerial positions at CNES from 1982 to 2005, he was Director of BGI (Bureau Gravimetrique International from 1979 to 2009, Secretary General of IUGG between 1991 and 1999, Executive Director of GRGS from 1997 to 2004, co-founder of EGGC (the European GOCE Gravity Consortium) within ESA (European Space Agency). He was member of many national and international councils, committees and groups of experts. He published 140 papers in refereed journals, over 300 in total. He is the recipient of many prizes and medals, among them: NASA Geos 3 Special Achievement Award, 1976; CNES Bronze Medal, 1977; prize Gustave Roux of the French Academy of Sciences, 1983; NASA-JPL Magellan Achievement Award, 1994; CNRS Silver Medal, 1996; NASA-JPL Mars Global Surveyor Group Achievement Award, 1997; Vening-Meinesz Medal, EGU, 2002. He is Doctor Honoris causa of the Technical University of Graz, Austria (1996); member of the Academy of Air and Space, of the Academy of Sciences Inscriptions and Belles Lettres, of the Academia Europa; corresponding member of the Bureau des Longitudes, Fellow of the International Association of Geodesy (1991); Fellow of the American Geophysical Union (2005).