



Working toward the implementation of the Moon Village approach: The MOON VILLAGE ASSOCIATION

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Abstract

The Moon village is not a specific project for the exploration and the starting of the colonization of the Moon, but is an innovative approach based on the synergy of several actors, public (space agencies) and private (companies, research centers, universities). Although originated by Jan Woerner, ESA Director General, the idea is not pursued by a single agency as much as by a larger community of people interested in space exploration.

In particular, the Moon village has a wider scope than the exploration of our satellite: it is intended as a first step along the way of establishing humankind as a spacefaring civilization. The use of the Moon as a stepping stone for the exploration and then the settling of our solar system (starting with Mars) and beyond is an integral part of the concept.

The Moon Village Association is a non governmental organization founded by private citizens and companies to support the activities toward the implementation of the Moon village strategy and to explore synergies with other NGOs of different types.

Giancarlo Genta - Giancarlo Genta got a degree in Aeronautical Engineering in 1971 and one in Aerospace Engineering in 1972 at the Politecnico di Torino. He became assistant professor of Machine Design at the same University. He taught a course in Astronautical Propulsion and then he lectured in Motor Vehicle Mechanics. In 1983 he became Associate Professor of Design of Aircraft Engines at the School of Aerospace Engineering of Politecnico di Torino and then full Professor in Machine Design. From 1989 to 1995 he was head of the Department of Mechanics at Politecnico di Torino.

From 1998 to 2015 he coordinated the PhD course in Mechatronics at the PhD School of Politecnico di Torino. He is responsible for the courses in Automotive Engineering of Politecnico di Torino. Since 1999 he is a member of the Academy of Sciences of Torino and since 2006 he is a member (corresponding member since 2001) of the International Academy of Astronautics. In 2013 he received the International Yangel Medal for Outstanding Contributions to the development of space sciences and technologies and, in the same year, received the Engineering Science Award for outstanding achievement in engineering science of the International Academy of Astronautics. Since 2012 he heads the IAA Study Group on Human Mars Exploration (SG 3.16, and then SG 3.27). He is a member of the Advisory Board of the Starshot Project.

He is the author of over 350 scientific papers covering various sectors of mechanical design, published in scientific journals or presented at conferences, and of 4 patents. He is the author of 24 books, including textbooks, research monographies and popular science books. He is also the author of two science fiction novels, published in Italian and English.