

"Discovering the secrets of the universe through SpaceLand open microgravity flights"

Carlo Viberti, Engineering Doctor - President of COSMO SpaceLand (ONLUS Cultural Association) – www.SpaceLand.it

--- ABSTRACT ---

Phenomena ranging from crystal growth to fluid coalescence, from aggregation of matter to star and galaxies formation and collaps are all driven by gravity; our universe was formed as we know it now and it is further evolving thanks to gravity; as a matter of facts, our life and all of us exist thanks to it. So now let us think about a laboratory in which all of these phenomena can be reproduced and analyzed in all their respective aspects by increasing, dimming or switching on or off, at will, the effects of gravitational forces; a new era in basic and applied research and a new dimension to understand life for the general public are born. Microgravity has been frequently associated to human flight in Space, but this understanding can be misleading in many respects. Since the dawn of the spaceflight, less than 550 human beings have been flying in space; this statistic is indeed disappointing, given that nearly every human on the planet once harbored childhood dreams of routine trips to the stars. Those women and men have, with only a small handful of recent exceptions, been government employees handpicked by space agencies, giving critical inspiration to untold numbers of entrepreneurs, inventors, ordinary citizens and entire new industries and science research communities; with the current approach, the overwhelming majority of people (some seven billion and counting) will never have the opportunity to realize the dream of traveling to space, regardless of personal wealth or talents, and will have not the chance to contribute to that drastic advancement of science, biomedicine and technology that only the weightless environment might support.

The SpaceLand program since the year 2002, with the first funding by the European Space Agency for technology transfer studies addressing the Olympic Games and the general public (EWOTT Contract), is dedicated to democratize the access to space through microgravity and Lunar-Marsgravity flight campaigns on board special flight vehicles commissioned for this program. As demonstrated with its world's youngest (11 year old) and world's oldest (93 year old) men and the first 100% disabled woman having flown in weightlessness for microgravity research activities (some commissioned by Nobel-Prize-winner's research group), the SpaceLand program dropped the price of safely flying and experimenting in a large and research-friendly weightless environment from the hundreds of millions of dollars to less than ten thousands EUR, including training and flight qualification. The multimedia presentation at the Space Renaissance congress will show unprecedented videos of ordinary people supporting cutting-edge research on SpaceLand flights while living the fascinations of an out-of-this-world experience finally open to anybody.



--- SUNTO BIOGRAFICO DELL'AUTORE ---

Eng. Doct. Carlo Viberti is a weightless and Mars-gravity / Lunar-gravity Flight Veteran for the European Space Agency's MIR and International Space Station programs and for the SpaceLand research and educational weightless flight campaigns carried out also for the Nobel Prize-winnerled European Brain Research Institute. Doct. Viberti has been proposed by the President of the Italian Space Agency as first suborbital astronaut-engineer for the first sub-orbital research flight campaign slated for 2015 with U.S. spacecrafts. Graduated cum Laude at 24 years of age at the Polytechnical University of Torino, he has flown more than 550 tests in weightlessness as well as in Lunar-g and Mars-g flight conditions both for ESA and the SpaceLand program which he is now chairing. Founder of Italian Parliamentary Committee for Technology Innovation (COPIT Piemonte), he is also former Chairman of the European Space Agency's Technology Work Group for the ESA - Russian Space Station MIR technology program (EuroMir) which served as International Space Station "ISS" Phase 1 program. He has won several Prizes, Awards and Scholarships from international and national public institutions such as ESA, Italian Astronautics and Aeronautics Association, FIAT Aviation, the Prize "Torre di Castruccio" as Gold Medal of the President of the Republic of Italy, etc. Acting as Mission Commander for SpaceLand flight campaigns at NASA KSC, on Nov 5th 2005 he became 1st non-U.S. to take off for microgravity research flights from the NASA Space Shuttle L.F. in Cape Canaveral.