Nano-satellites, the tool for a new economy of space: Opening space frontiers to a wider audience

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Space is still a frontier. The advantages of research in microgravity conditions are still somehow a private niche of the big aerospace contractors and main space agencies. But the landscape is changing and an incipient effort is being pursued to open space frontiers to small and medium-sized companies, universities, under-developed countries and non-profits. We will revise the advantages of microgravity research and a tool to conduct it at low-cost, rapid response and flexibility through the use of nano-satellites opening thus space frontiers to a wide audience. These highly capable satellites can support a wide range of mission objectives from pure research to technology demonstrators and space qualification tests. The small satellites market is valued 600 M USD to 1,000 M USD yearly with an estimated 2,200 to 2,700 needed launches in the 2015-2020 timeframe. We will also introduce a new launcher under development to serve specifically the nano-satellite incipient market to help solve the scarce launching opportunities served today by conventional launchers.

Biography
Gloria Garcia Cuadrado is a President and CEO at Celestia Aerospace, a company devoted to the opening of space access to SMEs and research groups through the use of nano-satellites. She firmly believes a new economy of space has to be developed for the benefit of all. She is Theoretical Physicist. She completed her Graduation in Physics department at University of Barcelona; Master in Theoretical Physics and; Diploma in Space Studies. She has specialization in Space Business and Management from International Space University, California, USA. She has been a Researcher at Institute of Space Studies of Catalonia; Head of Human Space Flight and Advanced Concepts at Aerospace Research & Technology Centre; and General Director of Aerospace Cluster of Catalonia, gathering more than 80 enterprises, university, technology centers and government devoted to enhance the aerospace industry. She is also a passionate Advocate for scientific education and communication.

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