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## Floating into Deep Space

Rob La Frenais, Tomas Saraceno, John Powell

Is it possible for spaceflight to become more sustainable? Artist and architect Tomas Saraceno proposes a long-term artscience research project based on his initial work with solar balloons to join with the efforts of engineers such as John Powell, working on the Airship to Orbit experiments, which describe a three stage process of using airships to fly to a large suborbital "Dark Sky Station' then literally floating into orbit with additional electrical and chemical propulsion. (See: http://www.jpaerospace.com)

In his artworks Tomás Saraceno proposes cell-like flying cities as possible architectonic living spaces in direct reference to Buckminster Fuller's Cloud Nine (circa 1960). The fantastic architectural utopia Cloud Nine consists of a freely floating sphere measuring one mile in diameter that offers living space to several autonomous communities encompassing thousands of inhabitants each. The notion of the cloud is essential to the artist's work. The cloud as metaphor stands for artistic intention, for the meaning of territory and border in today's (urban) society, and for exploring possibilities for the sustainable development of the human living environment.

In Saraceno's work this environment is not limited to the earth, but is explicitly conceived to reach into outer space. (Biomimetic Constructions- On the works of Tomás Saraceno By Katharina Schlüter) Saraceno is also interested in human factors experiments using his existing constructions as analogue environments for living on Mars and is proposing carry out a series of workshops, experiments and solar balloon launces in White Sands desert in early 2016 in collaboration with the curator Dr Rob La Frenais, the Rubin Center at The University of Texas at El Paso and various scientific partners.