TETHERS AND POSSIBLE APPLICATIONS FOR ARTIFICIAL GRAVITY PRODUCTION IN SPACE

Claude Nicollier¹

Claude Nicollier has not yet provided his abstract but he told me that he will talk mostly about tether behavior in Space and secondarily about artificial gravity production.

As you may know Robert Zubrin in its first book ("The Case for Mars") proposed that (1) the habitat of a manned mission and the last stage of its launcher be linked together by a tether (after the last stage has completed its combustion); (2) that the couple thus created, be rotated (small impulsions at the level of the habitat and of the last stage of the launcher) in order to create artificial gravity inside the habitat during the flight, the intensity of the internal artificial gravity being increased by shortening the tether.

In this context the knowledge of the behavior of a tether is absolutely essential and Claude Nicollier had the experience of such behavior during one of his space flights.

Pierre Brisson

¹Astrophysicist, Swiss Astronaut, Professor at the EPFL, member of Honour of the Mars Society Switzerland