

IAF SPACE PROPULSION SYMPOSIUM (C4)  
Interactive Presentations - IAF SPACE PROPULSION SYMPOSIUM (IP)

Author: Mr. Jamel Metmati  
THALES Services, France, djamel.metmati@thalesgroup.com

THE NANO-PROBE BY THE PHOTON TRANSPORTATION IN THE DEEP SPACE

**Abstract**

The Deep Space observation is based on the probe and radio-telescope on Earth and in Space. Some robots complete the observation on the ground for close planets. It provides pictures and the results through the electromagnetic wave length give the reading grid for data interpretation. In this way, the analysis of solar system and Deep Space demonstrate the chemical composition of planets. Moreover, the probes in Deep Space are limited by the propulsion which is not enough powerful to cross a large distance from Earth to the interesting targets like TRAPPIST-1 system, ALDEBARAN, PROXIMA CENTAURI and ORION constellation. The nano-probe shall provide the capacity to improve the exploration of our Deep Space through secured nano-components. The transportation of these nano-probes shall be realised by the embedded photon particles to catch a speed close to the light. Then, the slowdown shall be initiate by the quantum entanglement from Earth in computing the right moment in the distance to cancel the embedded photon particles. This methodology is connected with the quantum transmission and the application of the nano probe could be used as sensors in the Deep Space to understand the Space weather and the behaviour of the high energy particle.