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## 20th IAA SYMPOSIUM ON VISIONS AND STRATEGIES FOR THE FUTURE (D4) Strategies for Rapid Implementation of Interstellar Missions: Precursors and Beyond (4)

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## AN EXPLORATORY ANALYSIS ON THE POSSIBILITY OF ANTIMATTER IN THE FUTURE SPACE PROPULSION FOR INTERSTELLAR MEDIUM.

## Abstract

As we are entering in the age of human space civilization, our appetite towards space travel is consistently enlarging. But still we are bounded with the limits in order to interstellar travel. Limited energy, limited velocity as such limited propulsion. Even so after the CERN achievement on antimatter there is a hope for space propulsion to break the limits of space travel through antimatter space propulsion. It is enormously difficult task to develop an antimatter drive but scientists are continuously keeping eyes on the particular concept. It's the only known process with the acceptancy of large amount of energy return and can be utilized as thrust for spacecrafts. This paper will describe the aspect with regard to antimatter annihilation reaction (with combinations of antiproton-proton-neutron) and comparative research on advance future propulsion efficiency. This study will assess analytical simulation of antimatter propulsion for heliosphere escape mission. From production to custody concerning antimatter is a serious challenge however the reward of such technology will surpass the boundary of space exploration.