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EXPERIMENTAL STRUCTURE FOR COSMIC RADIATION'S INTERACTION ON SPACECRAFT  
WITH SPINNING ARTIFICIAL GRAVITY**Abstract**

A theoretical derivation was performed for studying the parameters and impacts of cosmic radiation on a spacecraft that is equipped with active spinning artificial gravity. The equation model was developed to understand the impacts and interaction of radiation with spacecraft. Low gravity has always been a challenge to physiological factors of the crew such as bone decalcification, muscular atrophy and several negative effects are faced in space medicine sector. This is why many new artificial gravity systems are being developed and tested. One of the artificial gravity that is being developed is the spinning spacecraft. In this paper an experimental model was studied to understand the radiation pressure impacts on the spinning spacecraft for its interactions such as absorption, adsorption and reflectivity. The results of this paper is to create an experiment on artificial gravity spacecraft for Photoelectric and Radiation Pressure. Further the paper also discusses about validating the mathematical model with the feasibility study of an experiment to test the impacts of radiation on such spinning artificial gravity spacecrafts.