

SPACE DEBRIS SYMPOSIUM (A6)  
Mitigation and Standards (4)

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SPACE DEBRIS & THE SPACE ELEVATOR

**Abstract**

Abstract: Crucial to the design and operation of a Space Elevator will be knowledge of the risks from space debris which will drive requirements for its design and operation. This paper will review the risk of debris focusing on environment utilizing the Penny-Jones equation for calculating Probability of Collision (PC). It will present results of PC calculations for the Low Earth Orbit regime where the risk is greatest. It will then address mitigation strategies including those enabled by the Space Elevator. Finally, we will address some of the policy issues that must be addressed to enable “rules of the road” for operation of the Space Elevator.