Interstellar Flight: The Perspective of Theoretical Physics

Presented by:

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Abstract

The quest for the stars is an inspiring one that promises discoveries and new knowledge that has profound implications for our view of the Universe. Yet, to travel to the stars apparently requires breakthroughs in our physics and engineering knowhow. In this presentation we examine the problem from the standpoint of theoretical physics and assess the plausibility or otherwise of its fruition. We look at the many claimed reasons for why interstellar flight is perceived to not be possible and examine this thinking to elucidate an objective assessment. This includes consideration of factors such as velocity and energy requirements, particle bombardment, energetic radiation, the effects of special and general relativity in relativistic missions. We will also briefly discuss the problem of faster than light travel.

Light refreshments will be served.