FZU Institute of Physics of the Czech Academy of Sciences

Invitation

to the seminar of Division of Elementary Particle Physics of the Institute of Physics of the Czech Academy of Sciences

Les Johnson

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Madison, USA

Solar Sail Propulsion For Exploring the Solar System

Abstract: Imagine using sunlight to sail through space. Doing so is now possible using a solar sail. This exciting new type of space propulsion will enable small spacecraft to access propulsive-intense destinations, allowing observations of the Sun and deep space missions that are currently extremely difficult or impossible to achieve. The continuous photon pressure from the sun provides thrust, with no need for the heavy, expendable propellants employed by conventional on-board chemical and electric propulsion systems. NASA is developing solar sails ranging in size from 86 m^2 (for use by extremely small spacecraft) to as large as 2000 m^2 for spacecraft with masses up to 100 kg. The fundamentals of solar sailing will be described as will the exciting potential future missions they will enable: from those that help us better understand the sun to those that might one day allow us to send spacecraft to another star.

When: Thursday, October 30, 2025 at **2PM**
Where: A. Kochanovská hall, FZU, Pod Vodárenskou věží 1, Prague

For more information, please see https://indico.fzu.cz/event/315/

Roman Lysák Jiří Hejbal