



Udaipur Solar Observatory/ Physical Research Laboratory

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SEMINAR

Particles and Fields in the Solar System

(Prof. Daniel N. Baker, Director, Laboratory for Atmospheric and Space Physics,

University of Colorado, Boulder, USA & Vikram Professor, PRL)

Even before the official dawn of the Space Age – that is, the launch of the Sputnik and Explorer spacecraft in 1957-1958 – many investigators around the world were engaged in space physics research. Using rockets to get to the fringes of outer space, early researchers made pioneering observations of the Sun and Earth's upper atmosphere. This talk will recount some of the earlier history of contributions to Sun-Earth ("solar terrestrial") studies. A principal focus of the talk will be the modern studies of energetic particles and electromagnetic fields in Earth's cosmic neighbourhood. From a rather personal perspective, my Laboratory for Atmospheric and Space Physics (LASP) has been playing an increasingly prominent role in forefront studies of Earth's "magnetosphere" and LASP researchers are using this core terrestrial knowledge to advance planetary and astrophysical understanding as well. Moreover, study and understanding of the space environment of Earth is absolutely essential for our knowledge of "space weather" which represents a major threat to our modern technological society. The presentation will address all these aspects and will conclude with a look forward to future solar system programs and opportunities.

Date: Feb 23, 2015

Time: 10:30 hrs

Venue: USO Seminar Hall