

理学部物理学科・宇宙物理セミナー



開催日時・場所(Date&Place)

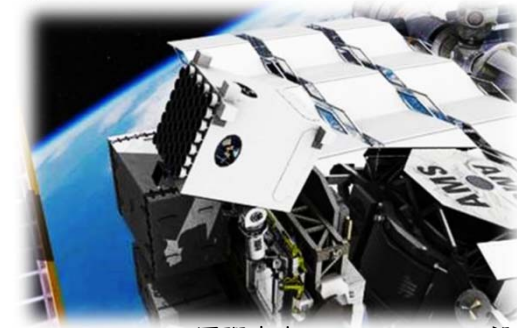
2019年7月26日(金) 17:00 ~ 18:30

理学部1号館4階・物理会議室

講演者 (Speaker)

Dr. Gaurava Kumar Jaisawal

(National Space Institute, DTU Space, Technical University of Denmark, Eleckrovej, Denmark)



国際宇宙ステーションに設置されたNICER

講演題目(Title)

NICER views of neutron stars' extreme physics

概要 (abstract)

A new dawn in the high energy astrophysics has begun after the launch of the Neutron Star Interior Composition Explorer (NICER) X-ray instrument on the International Space Station in June 2017. NICER provides an unprecedented timing and spectral sensitivity in the 0.2-12 keV (soft X-rays) range and is designed to explore the extreme physics around neutron stars. Some of the exotic physics of these compact objects rely on the understanding of thermonuclear bursts that arise from the unstable burning of accreted hydrogen and/or helium on the stellar surface. We have witnessed many exciting X-ray bursts, allowing us to probe the extreme burning physics and also the equation of state of neutron stars. Some of the results will be presented in this talk. I will also discuss our recent findings on X-ray pulsars, mainly focusing on a case study of super-Eddington accretion on a pulsar Swift J0243.6+6124, also known as the first Ultraluminous X-ray pulsar in our Milky Way Galaxy.

2017年にNASAが国際宇宙ステーションに設置したX線観測装置NICERによる、中性子星パルサー観測など最新情報をお話いただきます。

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