

第93回(2024年度第09回) 極限宇宙研究拠点セミナー (the 9th Core-U Seminar in 2024)

日時 : 2024年08月01日(木)14:35 -16:05 Date/Time: 1st/Aug. (Thu.)/2024 14:35-16:05
形式 : 理学部C212 & Zoom Format: Faculty of Science, C212+online (zoom)
講師 (Speaker) : Chin-Ping Hu (National Changhua Univ. of Education, Taiwan)

題目(Title)

Unveiling the Connection between Fast Radio Bursts and Magnetars

概要(Abstract)

Fast radio bursts (FRBs) are one of the most puzzling astrophysical phenomena in this decade. Although numerous theoretical models have been proposed, the origins of FRBs remain unclear. Magnetars, a subclass of neutron stars characterized by their extremely strong magnetic fields and diverse X-ray phenomenon, emerge as strong candidates for FRB generation. In this talk, I will cover the observational evidence linking FRBs to magnetars, especially our recent findings related to the FRB-emitting magnetar SGR 1935+2154. Thanks for high-cadence observations by NICER and NuSTAR observatories, we observed two spin-up glitches occurring roughly nine hours apart during an outburst. These glitches coincided with an intermediate flare, a forest of X-ray bursts, rapid spectral changes, and an FRB. These observations suggest that rapid changes in rotation frequency may trigger these energetic phenomena, and provide insights for future observations.

Zoom link :

<https://us02web.zoom.us/j/88070656908?pwd=kZLIAikzaMpl6OqTA5xlkvfEwIXKBq.1>

Meeting ID: 880 7065 6908

Passcode: FRB-NS

本セミナーは共同セミナー（理工学融合共同演習）の対象です。共同セミナーの出欠確認は対面参加者のみとし、出欠はセミナー終了時にC212で取ります。サインを記入する書類を持参して下さい。

「広島大学 極限宇宙研究拠点 (Core-U) セミナー」世話人 両角卓也, 山口頼人, 水野恒史および木坂将太

問合せ先 : e-mail: kisaka@hiroshima-u.ac.jp