



第88回(2024年度第04回) 極限宇宙研究拠点セミナー (the 4th Core-U Seminar in 2024)

日時:2024年06月24日(月)16:20-17:50 Date/Time: 24th/Jun. (Mon.)/2024 16:20-17:50 形式:理学部C212 & Zoom Format: Faculty of Science, C212+online (zoom) 講師 (Speaker): Regina Caputo and Jeremy Perkins (GSFC/NASA)

題目(Title)

AMEGO-X: Next Generation All-Sky Gamma-Ray Observatory (by Regina Caputo) and

BurstCube: A Cube-sat for gravitational-wave counterpart (by Jeremy Perkins) 概要(Abstract)

All-sky monitoring and survey of high-energy phenomena have become increasingly important these days. We will have two seminars about such missions, one is AMEGO-X and the other is BustCube.

AMEGO-X is a multimessenger astronomy mission concept. It will be sensitive to gamma-ray photons in the energy range from about 100 keV to 1 GeV and transient events down to about 25 keV. During its three-year baseline mission, AMEGO-X will observe nearly the entire sky every two orbits, building up a sensitive all-sky map of gamma-ray sources and emission. It aims to understand how supermassive black holes accelerate cosmic rays and produce neutrinos, how binary neutron star mergers produce relativistic jets, and where cosmic rays are accelerated in our Galaxy.

BurstCube is a shoebox-sized satellite designed to study the universe's most powerful explosions, gamma-ray bursts. Specifically, BurstCube will hunt for short bursts, which last less than two seconds. Short bursts most commonly occur following the collisions of neutron stars, the superdense remnants of massive stars that exploded in supernovae. Astrophysicists are interested in these phenomena because they also produce gravitational waves, or ripples in the fabric of space-time. By studying both light and gravitational waves – an approach called multimessenger astronomy – they can learn more about different aspects of the event.

Zoom link : https://us06web.zoom.us/j/6856856345?pwd=yy1PoUaJFzvDp0elfF9aH1JIJUEISK. 1&omn=87110760851 Meeting ID: 6856856345 Passcode: 314159

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