

IAF SYMPOSIUM ON FUTURE SPACE ASTRONOMY AND SPACE PHYSICS MISSIONS (A7)
Space Agency Strategies and Plans (1)

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SPACE ASTROPHYSICS PROGRAM OF CHINA

Abstract

I will present the status and plan of the current and future space astronomy missions of China: 1) Insight-HXMT X-ray mission (launched on June 15th, 2017, mostly on X-ray binaries and GRBs); 2) GECAM (to be launched by the end of 2020, two small satellites covering full sky simultaneously on GRBs and other transients from several keV to MeV); 3) SVOM (to be launched by the end of 2021, carrying optical and X-ray telescopes, a wide FoV hard X-ray imager and three gamma-ray monitors, mostly on GRBs and other transients); 4) EP (to be launched by the end of 2022, carrying many wide FoV lobster-eye X-ray telescopes and two narrow FoV X-ray follow-up telescopes, mostly on tidal disruption events, GRBs and many other transients); 5) eXTP (a large X-ray observatory developed by a large Sino-European consortium for launch around 2027, carrying large arrays of X-ray timing, spectroscopy and polarimetry telescopes, as well as a wide field monitor); 6) HERD (a large cosmic-ray experiment onboard China's space station for operation around 2025, with unprecedented acceptance and energy range for direct measurements of cosmic-rays, electrons and gamma-rays in space). The latter two missions (eXTP and HERD) are also the key missions for the Exploring the eXtreme Universe (EXU) program, an international mega-science project proposed to the Ministry of Science and Technology (MOST).