

Title: The SVOM contribution to Multi-Messenger Astrophysics

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Abstract:

The Space Variable astronomical Object Monitor (SVOM) is a Sino-French mission dedicated to the detection and characterization of Gamma-Ray Burst and other transient sources.

SVOM is expected for launch by the end 2021 and will be composed by space-borne and ground based instruments. The space-borne instruments include two large field of view X/gamma ray monitors (ECLAIRs and GRM), operating from 4 keV up to a few MeV, and two narrow field instruments (MXT and VT) optimized to accurately localize and study the X-ray and optical counterparts of GRBs. The space segment of the mission will be complemented by ground based dedicated instrumentation including a telescope system with very wide field of view (>5000 square degrees) but shallow sensitivity (GWACs, operating in the optical band) and narrow field robotic telescopes operating in the NIR and visible bands (Chinese and French GFTs).

This collection of instruments will be suited to play a role in the detection and follow-up of multi-messenger sources. Indeed a significant part of the SVOM observing time will be devoted to Target of Opportunity observations in order to contribute to fast localization and multi-wavelength identification of the counterparts of multi-messenger sources. I will present the capabilities of SVOM, as well as its data and collaboration policies.