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## Crystal Eye: a wide sight on the Universe for X and gamma ray detection

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Crystal Eye is a new concept of space-based telescope for the observation of 0.1-10 MeV photons exploiting a new detection technique, which foresees enhanced localization capability with respect to current instruments.

This is now possible thanks to the use of new materials and sensors.

The primary scientific goal is the detection of the electromagnetic signal of extreme phenomena in the Universe. In order to enhance their study with many messengers, the satellite will provide an alert to both space and ground based experiments.

A full scale model of the Crystal Eye detector is now under design and construction.

Moreover, a smaller prototype has been set up to fly aboard of the Space RIDER (ESA) on a LEO orbit (400 km, 5.3° of inclination) for two months in late 2024.

We present here the Crystal Eye mission concept and performance.

### Eligibility for "Best presentation for young researcher" prize

No

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