

<b>Proposal Title</b>	<b>Proposal point of contact</b>	<b>Italian point of contact (if the proposal point of contact is not italian)</b>	<b>INFO/Main Objectives</b>
The Synoptic Survey from Space (SSS) mission	Campana Sergio (OABrera)		A large synoptic optical survey from space using a relatively large optical system (>80 cm) and a large field of view (>1 deg <sup>2</sup> ).
GAME - GRB and All-sky Monitor Experiment	Amati Lorenzo (IASF Bo)		To measure the photon spectrum and timing of the prompt emission of GRBs over a broad energy band (~1 keV to ~ 10 MeV), combined with arcmin location accuracy. To monitor the X-ray sky in the 1/2 - 50 keV band with a few arcmin source location accuracy and a few mCrab daily sensitivity over a large field of view.
Gamma - light	Tavani Marco (IAPS)		To observe both the Universe and our Earth in the poorly known and challenging energy range 10-100 MeV with detection capability up to GeV energies.
A- Star - All-Sky Transient Astrophysics Reporter	Osborne Julian (UK)	Mereghetti Sandro (IASF Mi)	A low-earth orbit satellite providing real-time alerts and positions of high-energy transient celestial outbursts, including GRB, by use of hard and soft X ray telescopes.
Aware - All-sky Wide Area Experiment	Feroci Marco (IAPS)		To monitor large fractions of the sky at any time and the all sky every 2 hours, in the energy range 2 - 50 keV.
MAGIA - Missione Altimetrica Gravimetrica geochimica lunare	Orosei Roberto (IAPS)		To define the internal structure of the Moon and its evolution. To study the geochemical evolution of the Moon and of the rock forming minerals. To extend through detailed crater counting the dating of different lunar units from which samples weren't collected. Inventory of volatiles, and in particular ices on the Moon.
CHEER - Close by Habitable Earths ExploreR	Ragazzoni Roberto (OA Pd)		To detect Earth twins orbiting around close-by solar like stars, and accurately derive their internal structure. To detect superEarths, Neptunes, and Jupiters orbiting close-by F, G, K, and M dwarfs suitable for follow-up (radial velocity measurements to determine their internal structure; spectroscopic measurements to determine the composition and properties of their atmospheres).
X-Posit: X-ray Polarimetric Spectroscopic Imaging Telescope	Caroli Ezio (IASF Bo)		Wide field spectroscopic imaging polarimeter for hard X and soft gamma-ray observations of both transient and persistent cosmic sources.
The Polarised hard X-ray sky	Pearce Mark (Sweden)	Soffitta Paolo (IAPS)	Polarised X-ray astronomy providing entirely new information regarding the physics of emitting regions, the transfer of radiation in conditions of strong magnetic and gravitational fields and scattering on highly asymmetric systems, such as disks, columns, and coronae seen edge on.
The MARIA Mission - Multi Array for Rapid Imaging of Afterglows	Alberto J. Castro Tirado (Spain)	Stefano Covino (OABrera)	To measure early long wavelength photons from GRBs down to sub-second timescales for the first time, in order to gain a deeper understanding of GRB mechanisms, and potentially opening up the z>10 universe to point source emission probes for the first time.
Sirius - A Low-cost Extreme Ultraviolet Observatory	Martin Barstow (UK)	Isabella Pagano (OAcT)	High-resolution Extreme Ultraviolet (EUV) spectroscopy mission to carry out a survey of stellar activity, white dwarf evolution and the local galactic environment. To investigate the density, temperature, composition, magnetic field, structure, and dynamics of hot astrophysical plasmas (log T = ~5-7), addressing basic questions of stellar evolution and galactic structure.
GAME - Gravitation Astrometric Measurement Experiment	Mario Gai (OATo)		The Gravitation Astrometric Measurement Experiment (GAME) is a small mission aimed at Fundamental Physics tests in the Solar system, i.e. light bending and precession of Mercury's perihelion, with goal precision on the <i>gamma</i> and <i>beta</i> parameters of the Parametrised Post-Newtonian formulation of General Relativity of 10 <sup>-7</sup> and 10 <sup>-5</sup> . The measurement principle is differential astrometry among stellar fields, combining coronagraphy and Fizeau interferometry.

<p>SURO-LC - The Space Based Ultra-Long Wavelength Radio Observatory</p>	<p>Willem A. Baan(Netherlands)</p>	<p>Gabriele Giovannini (UniBo)</p>	<p>A novel, low-cost, passive formation flying, distributed aperture all-sky radio telescope, consisting of nine satellites, operating below 70 MHz, and particularly in the virtually un-explored frequency domain below 30 MHz: a range inaccessible with existing and planned Earth based radio telescopes. A unique opportunity for scientific discovery by establishing a high-resolution all-sky survey at low frequencies.</p>
<p>HiReX - High Resolution X-ray Spectrometer</p>	<p>Andrew Holland (UK)</p>	<p>Fabrizio Nicastro (OARoma)</p>	<p>A small X-ray observatory with mirror, high resolution grating and detector system. The mission's main science driver is the detection and study of the 'missing baryons' in a Warm-Hot Intergalactic Medium.</p>
<p>ADAHELI+ - ADvanced Astronomy for HELIophysics Plus</p>	<p>Francesco Berrilli (UniRmTorVer)</p>		<p>To investigate the inhomogeneous and fast dynamic nature of solar atmosphere via multi-spectral, high spectral resolution, high-cadence imaging over very long time scales. To investigate the multiscale nature of solar plasma flows and their interaction with magnetic elements. To measure the contribution of low frequency plasma waves to coronal heating. To systematically measure, for the first time, the Hard X-ray polarization signal from solar flares.</p>