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IXPE (Imaging X-ray Polarimetry Explorer) an upcoming new window in X-ray Astronomy and future opportunities.

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At last, in few months, the window of Astronomical X-ray polarimetry will be re-opened after more than 40 years. IXPE the Imaging X-ray Polarimetry Explorer, is the next NASA Small Explorer Mission with a decisive contribution of Italy. Three X-ray mirrors focalize the radiation into three detector units that host the polarization sensitive detectors entirely devised, built, tested and calibrated in Italy. For the first time it will be possible to perform polarimetry resolved in time, energy and space in 2-8 keV energy range. IXPE mission was approved in January 2017. The flight is targeted for the end of 2021. Polarimetry is expected to provide a wealth of information determining either the emission processes themselves in celestial X-ray sources and the magnetic field configuration at the site of particle acceleration, disentangling the geometry of compact objects and probing fundamental physics effects. Future experiments are being devised on the path of what IXPE will discover and they will be briefly presented.

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