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## Enabling precise X-ray polarimetry for the IXPE space explorer

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Successfully launched in December 2021, after only four years from the adoption, IXPE belongs to the NASA Explorers program, which offers frequent flight opportunities for world-class scientific investigations from space.

IXPE will accomplish the first-ever survey of the polarization properties of tens of celestial X-ray sources, with percent accuracy, and within the boundaries of a small explorer program.

This goal can be achieved with the use of Gas Pixel Detectors, which precisely reconstruct the sub-mm long tracks of single electrons generated by the photo-electric interactions of incoming soft X-rays.

This poster summarises the most important design elements of the GPDs and of the Detector Unit housing them, the qualifications obtained for operating them onboard IXPE, and the fast-paced integration and verification cycle entirely developed in Italy to make the IXPE mission a reality.

### Collaboration

IXPE

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