

# Accounting for systematic uncertainties in the Imaging X-ray Polarimetry Explorer (IXPE) detector response

## Modeling of systematics

- The shapes of instrumental response functions (IRFs) have been altered to simulate the effect of systematic errors
- A simulated source has been folded with the altered IRFs to see the error induced in parameter estimation

## Results

- Systematic errors are compatible with the statistical error in the polarization degree only for very bright sources.
- The systematic error largely dominates the statistical error in the Normalization and photon index for bright sources.
- Errors on the energy scale shows similar behavior and influences the polarization degree only for exceptionally bright sources, being the relevant source of uncertainty for spectral parameters.

