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ASTErIsM: a flexible python framework for detection, morphometry and shape classification of astronomical sources

ASTErIsM is a flexible python open-source framework for detection, morphometry and shape classification of astronomical sources, bases on clustering algorithm and machine learning. ASTErIsM works both on ccd images and photon list (e.g. Fermi). This framework is currently used as deblending algorithm for the Euclid pipeline. I will present the capabilities of the algorithm for:
1) detection and deblending (separation of confused sources) in optical images
2) detection and deblending for gamma-ray sources (Fermi data)
3) galaxy shape identification based on machine-learning
Related publications
https://ui.adsabs.harvard.edu/#abs/2013A%26A...549A.138T/abstract
https://ui.adsabs.harvard.edu/#abs/2016MNRAS.463.2939T/abstract
A preliminary documentation is hosted here:
http://isdc.unige.ch/~tramacer/asterism_doc/html/index.html

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