

ABSTRACT ONLY

STRONG LENSING: CANDIDATE SELECTION USING MACHINE LEARNING TECHNIQUES

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We expose different methods for the identification of gravitational arcs candidates in cluster of galaxies. We describe the existing methods that already had been applied to catalogs of galaxy clusters like COSMOS and the Hubble Frontiers Field Program.

We select a sample of arcs previously identified using standard image analysis packages. This sample was used as a training/validation set for different machine learning algorithms. The selected method will be applied to the new generation of imaging survey in order to produce new identification of gravitational lensing systems.

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