

Deep learning the astrometric signature of dark matter substructure

I will discuss the application of machine learning techniques for the detection of the astrometric signature of dark matter substructure. In this simple proof of principle example, a population of dark matter subhalos in the Milky Way act as lenses for sources of extragalactic origin. We show that machine learning applied to an SKA -like survey can be used to probe the substructure content of the Milky Way.

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