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Search for lensed gravitational-wave events with machine learning

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The growing significance of Gravitational Wave Astrophysics puts in evidence the need of techniques capable of effectively and reliably analyzing all the collected data. Furthermore, the search for lensing signatures within gravitational-wave signals is a challenging task that holds the potential to uncover fresh insights into fundamental physics, astrophysics, and cosmology. In this context, we train a set of different neural networks with various types of Gravitational Wave data and we compare their performance when classifying the data in three groups: plain noise, unlensed signal and lensed signal

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