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Photometric Classification of QSOs with Machine Learning Techniques.

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Abstract

With the advent of wide-area photometric surveys and the large amount of available data, the use of machine learning techniques is becoming more and more frequent to classify stars, galaxies and QSOs. In this work we investigate the performance of random forest in classifying QSOs using photometry of the 20 contiguous, equal-width, non-overlapping, medium-bands filters of the ALHAMBRA Survey. We systematically analyse the effects of the main free parameters on the final classification results and the advantages and limitations of using ALHAMBRA photometry in comparison to other surveys like Sloan (SDSS). The best performance is obtained when using colours from the ALHAMBRA survey.

My poster is available at <https://zenodo.org/record/7041705#.YxD2htVByvw>