

Detecting O₂ in the atmospheres of exo-Earths

Poster : yes

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We present our feasibility studies to detect oxygen in the atmospheres of Earth-like exoplanets orbiting low-mass stars with ground-based instrumentation mounted at extremely large telescopes, similarly to those presented by Snellen et al. (2013). We confirm that oxygen in the atmospheres of exoplanets can - in theory - be detected via ground based high-resolution transmission spectroscopy. However, we find important constraints to the technique which need to be taken into account for a successful observing strategy.