
Towards the detection of nearby exoEarths

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Abstract

The discovery of an habitable planet orbiting a nearby star is the most exiting challenge of the next decades. An arsenal of new telescopes and instruments will be devoted to this quest. From space or the ground, using high-resolution spectroscopy or high-precision photometry, in the optical or near-infrared, all techniques are being explored. I will review the main projects currently in preparation that will have the capability to discover nearby exoEarths. I will also discuss the limitations they will encounter in the unambiguous detection of such planets. Finally, I will draw my conclusions about what are the most important aspects that need to be solved in the next years to allow the exploration of habitable planets.

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