

Transiting Planets in Crowded Places

Tuesday, 19 October 2021 12:25 (15 minutes)

HRMOS will enable radial velocity searches for planets in clusters and towards the Galactic bulge at a scale previously unobtainable with single-object spectrographs. At present, the most comparable cluster planet searches have been for transiting planets with wide-field cameras. We have led a transiting planet search using data from the Kepler telescope towards NGC 6791, an old, metal-rich cluster. I will present the demographics of the planets found in this search and their host stars, highlighting what this search can teach us about similar future surveys with HRMOS and some of the unique benefits HRMOS will provide. I will also discuss the expected yield of transiting planets to be found in the Roman Space Telescope microlensing survey of the Galactic bulge, and how HRMOS will be able to work in concert with data from that mission to fully understand the Galactic distribution of planetary systems.

Type

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