

# Atmospheric Characterisation of Exoplanets with Broadband Color Filters on the PLATO 2.0 Mission

John Lee Grenfell (1), Mareike Godolt (2), Juan Cabrera (1), Ludmila Carone (3), Antonio Garcia Munoz (2), Daniel Kitzmann (4) and Heike Rauer (1)

- (1) Dept. Extrasolar Planets and Atmospheres (EPA), Inst. Planetary Research, German Aerospace Centre (DLR), Berlin, Germany ([lee.grenfell@dlr.de](mailto:lee.grenfell@dlr.de))
- (2) Centre for Astronomy and Astrophysics (ZAA), Berlin Inst. Technology (TUB), Berlin, Germany
- (3) Max Planck Inst. for Astronomy, Heidelberg, Germany
- (4) Centre for Space and Habitability (CSH), Uni. Bern, Switzerland

## Abstract

We assess broadband color filters for the two fast cameras on the PLATO 2.0 space mission with respect to atmospheric characterization via Rayleigh absorption, haze and geometric albedo on Hot Jupiters and Low Mass Low Density planets for different atmospheric composition and cloud scenarios for planets placed at 25pc and 100pc.