UK’s Involvement in Exoplanet Research - Terms of Reference

1. Introduction

1.1. The UK has a strong and sizable community interested in extra-solar planets which has significantly grown in recent years. We are involved in a number of ground and space based projects, including modelling, simulations and data analysis challenges. Some of the currently planned projects related to exoplanet research with UK involvement are: E-ELT, NGTS, Gaia, JWST/MIRI, SPICA, CHEOPS, ESPRESSO, PLATO and other planned space missions.

1.2. Up to now, exoplanet research has been dominated by the detection methods, but the characterisation of exoplanets is becoming increasingly important. The technology required to advance the field is challenging and will involve both new space missions and ground-based instruments over the next 20-30 years. A key long-term goal is to detect and characterise Earth-like planets in the habitable zones of solar type stars.

1.3. UK involvement in the development and exploitation of such future missions and instruments and associated theory and modelling is dependent on an overall financial settlement for STFC and UKSA that will allow involvement in the booming field of exoplanet research, and on satisfactory peer review.

1.4. A Review Panel has been convened in order to prepare and provide advice to STFC’s Science Board on a strategy for STFC supported exoplanet research.

2. Terms of Reference

- The remit of the Review Panel is to develop a coordinated strategy for UK involvement in exoplanet research that could enhance UK leadership in this area, taking into account the outcomes from previous reviews.
- The Review Panel will work with all elements of the UK exoplanet community to develop the strategy.
- The Review Panel is responsible for drafting the strategy; the Review Panel will meet in person or via teleconference as appropriate to develop the strategy. Support for meeting arrangements will be provided by the STFC’s Astronomy Group.
- The Chair of the Review Panel will present the Review Panel recommended strategy to Science Board.