

Physikalisches Kolloquium

Heike Rauer, DLR und TU Berlin
»Von "heißen Jupitern" bis zu "kühlen Erden":
Exoplaneten und die Diversität planetarer Systeme«

Einführung: J. Kühn

In this decade we have seen a rapid increase in our understanding of the nature of extra-solar planet systems and their host stars. Missions such as CoRoT and Kepler have confirmed that not only are extra-solar planets common, but that multiple planetary systems are also the norm. The detection of 'super-Earth' planets has expanded our planet inventory towards small, rocky planets, e.g. hot planets like CoRoT-7b and Kepler-10b and warm planets like in the Kepler 62 system. However, with increasing number of detections, a large diversity of planets becomes evident. This diversity raises new questions to the formation and evolution processes of planets, and also on the possibility of such planets to harbor life. Constraining our understanding of the underlying processes requires improved knowledge of the basic planet parameters, hence their mean densities, atmospheres and their age. The talk will give an overview on our knowledge of terrestrial exoplanets and how we will explore their nature with future space missions, like CHEOPS, TESS and PLATO 2.0.

Donnerstag, 06.11.2014, 17:30 Uhr,

KIT, Campus Süd,
Otto-Lehmann-Hörsaal, Physik-Flachbau (Geb. 30.22).
Anschließend Nachsitzung im Gastdozentenhaus „Heinrich Hertz“