

Uitnodiging

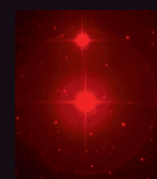
voor het bijwonen van de openbare verdediging van mijn proefschrift

'The hunt for red dwarf binaries and hot planets in the WFCAM transit survey'

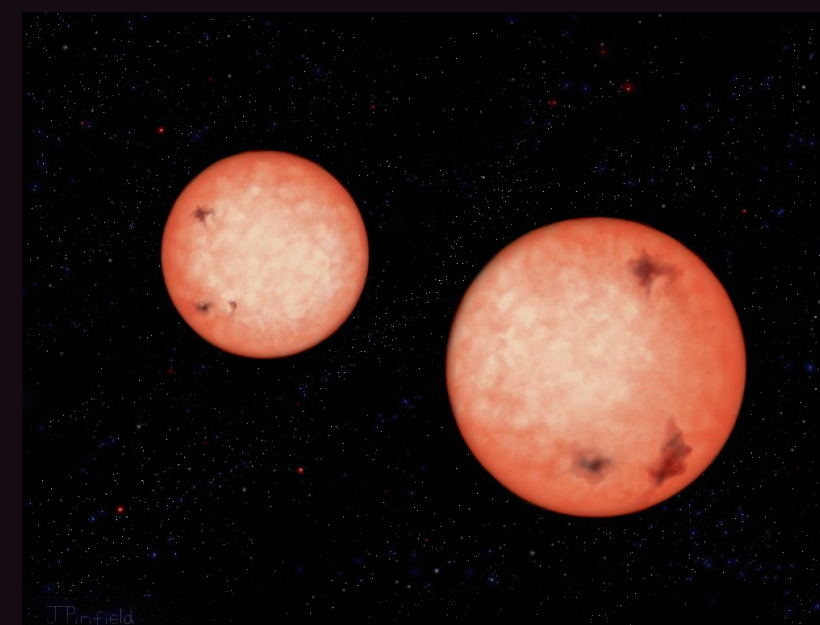
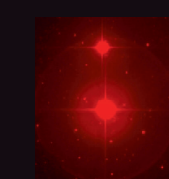
op woensdag 27 maart 2013 om 13:45 uur in het Academieggebouw van de Universiteit Leiden, Rapenburg 73.

The Hunt for Red Dwarf Binaries and Hot Planets

in the WFCAM Transit Survey



Bas Nefs



The Hunt for Red Dwarf Binaries and Hot Planets

Bas Nefs

Red Dwarfs are at the heart of Astronomy because they are the most abundant type of star that we know of in our Galaxy. Yet, surprisingly little is known about their formation, evolution and the nature of their companions.

In this thesis I present the first results of the WFCAM Transit Survey, a unique long-time monitoring program of many thousands of red dwarfs in the infrared, where they are the brightest. By studying their properties in eclipsing binary systems it is shown that red dwarfs are of great value to simulations of low-mass star formation, binary dynamics, stellar structure and ultimately the fundamental properties of Earth-like planets.