The handle http://hdl.handle.net/1887/20669 holds various files of this Leiden University dissertation.

**Author:** Nefs, Bas  
**Title:** The hunt for red dwarf binaries and hot planets in the WFCAM transit survey  
**Issue Date:** 2013-03-27
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.