

Report – Visit Oortprofessor 2018: Prof. James Kasting

Professor James Kasting from Penn State University, USA, visited Leiden Observatory from April 15 to May 2, 2018 as *Jan Hendrik Oort Professor 2018*. His stay was a great success. In his first week he delivered three very well attended and received **graduate lectures** on *Climate evolution on Venus, Earth, and Mars, Habitable zones and the search for life on planets around other stars, and Is the Earth rare?* His lectures, which even attracted an audience from Amsterdam and Utrecht, were filmed and are available on internet.

On April 23 & 24 we organized an **international workshop** on Planet Habitability and the search for life outside the solar system at the Boerhaave Museum, which was attended by 50+ participants, including 14 international invited speakers, all experts on exoplanets and astrobiology from the UK, France, Switzerland, Germany, and the USA. This was a great success, covering the modelling of planet habitability, transit spectroscopy, planets around M-dwarfs, predicting biosignatures, and the characterization of rocky exoplanets. Ample time for discussions were included, which were centered on whether planet around M-dwarfs could be habitable or not, what constitutes a reliable biosignature, and whether we have covered all routes to find life, or whether we are missing something.

On April 26, Prof. Kasting delivered the **public Oort Lecture 2018** in the Leiden Academy Building for a full-house of 250 people. In this lecture 'The Search for Life on Planets Around Other Stars' Kasting talked about the ways in which he searches for 'simple life' outside our galaxy. Leiden University made a short movie/interview about Prof. Kasting's Oort Lecture, which is available on Youtube: <https://www.youtube.com/embed/clH-gxWJDHs>