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b UNIVERSITÄT BERN

Friday, 06.12.2019, 8:30 a.m. – 5:00 p.m. UniS, Lecture Hall A-003, Schanzeneckstrasse 1

Hans Sigrist Symposium

Exoplanets Worlds Beyond Our Solar System

The discovery of planets orbiting other stars, known as exoplanets, is now routinely reported by scientists.

In recognition of the importance of this field, the Hans Sigrist Foundation is awarding its 2019 Hans Sigrist Prize to a distinguished exoplanet scientist: **Professor Ignas Snellen** (Leiden University), who is a pioneer in using ground-based telescopes to identify molecules in the atmospheres of exoplanets, which will pave the way for future detections of biosignatures.

The 2019 Hans Sigrist Symposium features a series of talks with Q&A, which are broadly accessible, on the past, present and future of exoplanet science.

www.sigrist.unibe.ch/symposium

Artist's impression of the TRAPPIST-1 planetary system

This artist's impression shows the view from the surface of one of the planets in the TRAPPIST-1 system. At least seven planets orbit this ultra cool dwarf star 40 light-years from Earth, and they are all roughly the same size as the Earth. They are at the right distances from their star for liquid water to exist on the surfaces of several of them.

This artist's impression is based on the known physical parameters for the planets and stars seen and uses a vast database of objects in the Universe.

Program

08:30 a.m. – 09:00 a.m. Welcome Coffee/Tea

09:00 a.m. – 09:05 a.m.

Prof. Dr. Norbert Trautmann

Hans Sigrist Foundation Opening of Symposium

09:05 a.m. – 09:10 a.m.

Prof. Dr. Kevin Heng

CSH, University of Bern

Explanation of 2019 Hans Sigrist Prize by Prize Committee Chair

09:10 a.m. – 10:00 a.m.

Prof. Dr. Ignas Snellen

Leiden University The Search for Extraterrestrial Life

10:00 a.m. – 10:30 a.m.

Prof. Dr. Kevin Heng

CSH, University of Bern On Abraham Flexner's The Usefulness of Useless Knowledge*

10:30 a.m. – 11:00 a.m.

Coffee/Tea Break

11:00 a.m. – 11:30 a.m.

Prof. Dr. Susanne Wampfler

CSH, University of Bern The Building Blocks of Life in Space

11:30 a.m. – 12:00 p.m.

Prof. Dr. Adam Burgasser

UC-San Diego + on sabbatical at CSH

Demographics of Exoplanets: From Hot Jupiters to Earth 2.0

12:00 p.m. – 02:00 p.m.

Lunch Break

02:00 p.m. – 02:30 p.m.

Prof. Dr. Douglas Lin

UC-Santa Cruz

Nature Versus Nurture in Exoplanets

02:30 p.m. – 03:00 p.m.

Prof. Dr. Brice-Olivier Demory

CSH, University of Bern

From the Remote Sensing of Life to Enhanced Brain Cancer Diagnosis

03:00 p.m. – 03:30 p.m.

Coffee/Tea Break

03:30 p.m. – 04:00 p.m.

Prof. Dr. Matthias Erb

Institute of Plant Sciences, University of Bern

A Chemo-Ecological Perspective of Life

04:00 p.m. – 04:30 p.m.

Prof. Dr. Raphael Sznitman

ARTORG, University of Bern The Age of Artificial Intelligence in Medicine

04:30 p.m. – 05:00 p.m.

Panel discussion involving all speakers

* This talk is based on the mini-book / essay of the same title written by the late Abraham Flexner, who was a pioneer of American graduate education and research and a co-founder of the Institute for Advanced Study (IAS) in Princeton. Flexner was responsible for hiring Einstein, Gödel and von Neumann to the IAS. Sponsored by the Hans Sigrist Foundation and the Center for Space and Habitability (CSH)

Organized by Prof. Dr. Kevin Heng, Center for Space and Habitability (CSH)

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