ALMA (ESO/NAOJ/NRAO)/M. Kornmesser

CSH Distinguished Lecture 2017

Building stars, planets and the ingredients for life in space

Prof. Dr. Ewine F. van Dishoeck
Leiden Observatory, Leiden University, NL

Friday October 20th 2017, 18:00

Please register here: http://cshlecture.ch
Participation is free of charge

The lecture will be followed by an Apero

Venue
Universität Bern, Hauptgebäude, Aula 210
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CSH
CENTER FOR SPACE AND HABITABILITY

Lecture from Ewine F. van Dishoeck: Building stars, planets and the ingredients for life in space

One of the most exciting developments in astronomy is the discovery of thousands of planets around stars other than our Sun. But how do these exoplanets form, and why are they so different from those in our own solar system? Which ingredients are available to build them? Thanks to powerful new telescopes, especially the Atacama Large Millimeter Array (ALMA), astronomers are starting to address these age-old questions scientifically. Stars and planets are born in the cold and tenuous clouds between the stars in the Milky Way, and ALMA allows us to zoom in on planetary construction zones for the first time. Water and a surprisingly rich variety of organic materials are found, including simple sugars. How do they compare with recent results from the Rosetta mission to comet 67 P/C-G in our own Solar System? Can these pre-biotic molecules end up on new planets and form the basis for life elsewhere in the universe?

Profile of the speaker

Ewine Fleur van Dishoeck is a Dutch astronomer and chemist. She is Professor of Molecular Astrophysics at Leiden Observatory, and the president-elect of the International Astronomical Union. She is a member of the Royal Dutch Academy of Sciences since 2001 and the U.S. National Academy of Sciences. She received the Albert Einstein World Award of Science in 2015, the Gothenburg Lise Meitner Award in 2014, the Spinoza Prize in 2000, the Bourke Award of the Royal Society of Chemistry (UK) in 2001 and the Gold Medal of the Royal Dutch Chemical Society in 1994. She was a Junior Fellow of the Harvard Society of Fellows.
She works on interstellar molecules, physical and chemical evolution during star formation and planet formation, submillimeter and mid-infrared astronomy, basic molecular processes, and the radiative transfer of line and continuum radiation.

https://en.wikipedia.org/wiki/Ewine_van_Dishoeck