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Colloquium Pierre et Marie Curie

Mardi 26 Septembre 2017, 16 :30
UPMC, Amphithéâtre Charpak
Domaines : astro-ph

Titre : *Building stars, planets and the ingredients for life in space*

Orateur : **Ewine Van Dishoeck (Leiden Observatory)**

Résumé : *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 exo-planets 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 Herschel Space Observatory and 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. Can these pre-biotic molecules end up on new planets and form the basis for life elsewhere in the universe ?*