



ID de Contribution: 73

Type: **Invited Presentation**

Seminar - The Webb telescope and the exoplanets

mardi 10 septembre 2024 16:10 (50 minutes)

On December 25, 2021, the James Webb Space Telescope (JWST), the largest and most complex telescope ever built, was launched from Kourou (Guyana) by an Ariane 5 rocket. Two weeks later, the telescope was fully deployed and by the end of January, it was in orbit around the Lagrange point L2 (1.5 million km from the Earth). Then, the 18 hexagons that constitute the primary mirror were co-phased and the four instruments put into operation. The performances are outstanding and most often better than specified.

In July 2022, scientific observations began. Thanks to its vast collecting area (25 square meters) and its large wavelength coverage (from 0.6 to 28 microns), this NASA flagship mission with the participation of Europe and Canada, has already a considerable impact on many astrophysical fields. In this talk, I will focus on the study of exoplanets. JWST brings a unique way to characterize the atmosphere of exoplanets. After having given an overview of where we stand in terms of exoplanets studies, I will focus on the latest discoveries made with the JWST, especially on rocky exoplanets.

Orateur: LAGAGE, Pierre-Olivier