JWST Status and prospects for habitability studies P. Ferruit¹

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The James Webb Space Telescope (JWST), developed jointly by NASA, the European Space Agency (ESA) and the Canadian one (CSA), is scheduled for launch in Spring 2019 and will be one of the major space observatories of the next decade. JWST will offer a unique combination of large collecting area, good spatial resolution, wide wavelength coverage (0.6-28.5 microns) and excellent stability. This is going to make it a very powerful tool for studying objects in our solar system as well as exoplanets.

In this talk, after giving a very brief update on the status of the mission, I will present the capabilities of JWST's instrument suite, with a focus on solar system observations, direct imaging of exoplanets and the study of transiting exoplanets.

I will then give an overview of the elements of the guaranteed time and early release science programs targeting our solar system and exoplanets. I will conclude with a short discussion on what prospects JWST will bring for habitability studies.

Short Summary

JWST will be a powerful tool for studying our outer solar system and exoplanets. I will first present the status and capabilities of the mission. I will then talk about the guaranteed time and early release science programs before concluding with a short discussion on what prospects JWST will bring for habitability studies.