

# Colloquium

Department of Fundamental Research

National Centre for Nuclear Research

**March 28 (Monday), 3:15 pm**

The meeting is held online:

<https://www.gotomeet.me/NCBJmeetings/gravity-physics>

(chrome browser is recommended)

## Dr Darko Donevski

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National Centre for Nuclear Research

## The James Webb Space Telescope

### - new infrared vision of the early Universe

**Abstract:** The James Webb Space Telescope (JWST) is the largest space telescope ever launched, and it will be a giant leap forward in our quest to understand the Universe and our origins. Delivery of the first scientific data from the JWST is expected for mid-2022, and will be the astronomical event of the year. JWST will provide unprecedented imaging and spectroscopic capabilities in the near to mid-infrared bands, with a sensitivity that will be even orders of magnitude higher than current and past facilities in some spectral ranges. Undoubtedly, in the years to come, JWST will open a huge, new discovery space in most areas of astronomy and astrophysics. In this seminar I will present big science questions that JWST observations are expected to answer. The particular emphasis will be given to scheduled observational projects related to the detection of objects in the early Universe. I will explain how these will help us to test theories and expectations from large cosmological simulations.

Stanisław Mrówczyński and Włodzimierz Piechocki