

Physics Colloquium Mainz

July 2, 2024 at 16 c.t.

Lecture room KPH,
Johann-Joachim-Becher-Weg 45, JGU

The recent launch of the James Webb Space Telescope (JWST) has revolutionized the field of exoplanet atmosphere characterization, thanks to its unprecedented sensitivity and broad wavelength coverage. In this talk, I will give a tour of the latest JWST results for transiting exoplanets, from gas giants down to rocky worlds. For the largest planets, I'll focus on the complex physical processes recently revealed in their atmospheres, including photochemistry, 3D effects, and cloud formation. Pushing down to smaller worlds, I'll share the first measurements of chemical composition for the elusive sub-Neptune population; and finally give an update on which (if any) rocky planets have atmospheres at all.

**A JWST View of Exoplanet Atmospheres:
Everything We Dreamed of and More**

Prof. Dr. Laura Kreidberg

**Max-Planck-Institute for Astronomy,
Heidelberg**

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