

Three Years of Transiting Exoplanet Spectroscopy with JWST

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Over the last three years, JWST has revolutionised our ability to characterise exoplanets via transit, eclipse and phase curve spectroscopy. Results have highlighted the diversity of gas giant atmospheres and delivered several surprises along the way. Within this talk, I will present some highlights of transiting gas giant spectroscopy during the first three JWST cycles, and how these results have informed our understanding of atmospheric chemistry and dynamics. I will also discuss some of the challenges involved in interpreting these datasets, arising from instrument choice, observation geometry, and sometimes quirks of the target itself. Underpinning all of these results is the requirement for accurate absorption data for the chemical species under consideration, a list that is rapidly expanding as we begin to characterise cooler and smaller planets.