Detecting Water on Super-Earths Using JWST

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Nearby lower main sequence stars host a class of planets known as Super-Earths, that have no analog in our own solar system. Super-Earths are rocky and/or icy planets with masses up to about 10 Earth masses. They are expected to host atmospheres generated by a number of processes including accretion of chrondritic material. Water vapor should be a common constituent of super-Earth atmospheres, and may be detectable in transiting super-Earths using transmission spectroscopy during primary eclipse, and emission spectroscopy at secondary eclipse. I will discuss the prospects for super-Earth atmospheric measurements using JWST.