

Script for ESOcast 141 Light: ESPRESSO

– the next generation planet hunter

ESOcast Light 141	
[Visual starts] New ESOcast intro	New ESOcast introduction Incl ESO logo
Title: ESPRESSO – the next generation planet hunter	
1. A powerful new instrument called ESPRESSO has just been installed on ESO's Very Large Telescope in Chile.	VLT at PAO
2. This exoplanet-hunter will for the first time combine light from the four VLT Unit Telescopes, to measure miniscule changes in the spectra of stars.	ESPRESSO footage
3. As a planet orbits its host star, its gravitational pull makes the star wobble a tiny bit.	Animation of Doppler (we have a good one but only 720p, hence cannot be used for an 4K ECL) Alternatively any animation on an exoplanet, orbiting a star?
4. The less massive the planet, the smaller the wobble – rocky and potentially life-bearing Earth-like exoplanets are very hard to spot!	[Show rocky planet with star?]

5. By detecting this wobble with extreme precision, ESPRESSO will find and study smaller planets than any of its predecessors.	Exoplanet animation or VLT footage
00:00 [Outro]	<i>Produced by ESO, the European Southern Observatory. Reaching new heights in Astronomy.</i>