

## **ESPRESSO at age 4: achievements, joys, and tantrums**

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The ESPRESSO spectrograph has been in operation at ESO VLT since 2018. In this contribution we will provide a status update on instrument performances, lessons learned, and pipeline developments towards 10 cm/s RV precision. We will first discuss the ESPRESSO calibration plan, calibration strategies, and residual uncalibrated instrumental effects (of known and unknown origin). We will then go through various pipeline improvements compared to the "old" HARPS pipeline, in particular on wavelength calibration, drift measurements, spectrum extraction, sky subtraction, CCF computation, and activity diagnostics. We will finish with some perspectives on what could be further improved in the future.