CALL FOR ESPRESSO SCIENCE VERIFICATION PROPOSALS

Deadlines

SV Run: 26/27 August 2019 Deadline for SV proposals: 5 July 2019 18:00 CEST

ESPRESSO is the Echelle SPectrograph for Rocky Exoplanets and Stable Spectroscopic Observations installed at the incoherent combined Coudé facility of the VLT. It is an ultra-stable fibre-fed échelle high-resolution spectrograph which collects the light from either one or the four UTs via the so-called UT Coudé trains. The whole system is built to provide, in its High-Resolution (HR) and high precision mode, the ultimate radial-velocity precision of 10 cm/s over a timespan of 10 years. The instrument is installed at the incoherent combined Coudé focus (ICCF) of the VLT.

The spectrograph is fed by two fibres, one for the target itself and the other for simultaneous calibration (either sky or simultaneous reference: Laser Frequency Comb, Fabry-Perot or Thorium-Argon lamp). The light from the two fibres is recorded onto a blue (378-525nm) and a red (525-788nm) detector. The instrument can operate in three different modes: High Resolution 1UT (HR, R~140000), Ultra High-Resolution 1UT (UHR, R~190000), and Medium Resolution 4UTs (MR, R~60000).

ESPRESSO in **4-UT mode (MR above)** only is offered to the community for Science Verification (SV) for 2 nights in August 2019. All astronomers are invited to participate in this opportunity to obtain unique science with ESPRESSO and thus to demonstrate its scientific capabilities. The deadline for this call for proposals is 5 July 2019. The community is invited to submit proposals for the ESPRESSO science verification using the simplified proposal template.

Proposals will be reviewed by an internal panel and allocated time on the basis of scientific merit and feasibility, as well as in the demonstrated ability of the Principle Investigators to deliver results on a timely basis.

The observations will be conducted during the nights of 26 and 27 August 2019 in Service Mode by a dedicated team of ESO astronomers. The ESPRESSO SV team will be able to assist the successful PIs in the preparation and optimisation of the OBs on a best effort basis.

The ESPRESSO data reduction pipeline will be available for reduction of the SV data. Proposers are reminded that all SV data are made public worldwide immediately after passing the usual quality control checks.

Please read the ESPRESSO documentation carefully and use the exposure time calculator (www.eso.org/observing/etc/) to estimate the exposure times. Overheads may be estimated in 8 minutes for pointing and 16s / 9s for readout & data transfer in 4x2 / 8x4 binning.

Please use the special LaTex template that can be downloaded from the ESPRESSO science verification web site

(http://www.eso.org/sci/activities/vltsv/). Proposals may also be prepared using any suitable text editor following the guidelines of the LaTex template, but please send us **only the pdf output** and please do not send finding charts at this time. The SV team will request these in due course.

Applications should be sent by EMAIL to espressosv@eso.org not later than 5 July 2019, 18:00 CEST.