Towards an integrated model of the WEAVE performance.

Gavin Dalton 1,2 , Sun Jeong Ham 1

¹RALSpace, STFC, UK ²University of Oxford, UK

Abstract

WEAVE is the next-generation wide-field optical spectroscopy facility for the William Herschel Telescope (WHT) in La Palma, Canary Islands, Spain. It is a multi-object "pick and place" fibre fed spectrograph with more than one thousand fibres behind a new dedicated 2° prime focus corrector, This is similar in concept to the Australian Astronomical Observatory's 2dF instrument1 with two observing plates, one of which is observing the sky while other is being reconfigured by a robotic fibre positioner. It will be capable of acquiring more than 10000 star or galaxy spectra a night.

We are developing an integrated model of the end to end performance of WEAVE. Combined with the detailed spectral library now available from XShooter, this willprovide full simulations of the WEAVE data and a detailed test of the data processing systems.