Title: Testing the AO Facility, Period 2/4, October 2014-February 2015: The GRAAL HAWK-I Mode

Date: Monday 20th April 2015

Venue: Old Auditorium (Telescopium) with Johann KOLB

Abstract:

Until end of 2015, the 2 Wavefront Sensing modules GRAAL and GALACSI of the AO Facility will be tested at ESO HQ on a dedicated setup called ASSIST, simulating the VLT environment and including Natural and Laser Guide Stars, atmospheric turbulence, and the Deformable Secondary Mirror (DSM) in its optical path. The second part (out of 4) of those tests has now been completed, it consisted in the characterization of the Ground Layer Adaptive Optics Mode of GRAAL intended to improve the Image Quality on HAWK-I.

The 2-part presentation given at the end the first part of the AOF testing (Maintenance and Commissioning Mode) is accessible on PDM (Slides and recorded video of the presentation), under the document number ESO-252345. For technical details and a reminder, it is recommended to consult those slides as the present talk will be different and complementary.

Indeed, I will only speak a little about the ASSIST Test Bench and the System Characterization, to focus on what kept us busy during the HAWK-I Mode System Tests: GLAO control, separation of Tip-Tilt from the High Orders, Automation of the SPARTA functions, development of the Full Acquisition Sequence, and finally GLAO performance estimation and Optimization.