

AGA-5802 - Observational Activities

(by groups of 1 or 2 students - individual reports)

Selection of targets (2) for spectroscopy

UBV photometry of an open cluster

telescopes: 60 cm (B&C) (photometry) + 1.6m (spectroscopy) OPD/LNA

project ID: P-44 Astrofísica Observacional IAG-USP

instruments: Ixon camera; UBVR filters + Coudé Spectrograph

date: 30/10/2021 (used for target selection and observation planning)

departure: TBD, from IAG **inner parking lot**

arrival: TBD evening at IAG

REPORT CONTENT AND SCHEDULE:

i.a. Instrument setup, Selection criteria for main target (open cluster) for photometry, Target properties, Technical justification (deadline 30/09)*

i.b. target selection for Coudé spectroscopy, aiming a continuum S/N ratio >15. Include backup target (deadline 30/09).

ii. detailed planning of photometric calibration (differential and absolute) (deadline 30/10)*

iii. planned exposure sequence for target, standard stars and instrument calibration, including individual and total exposure times per band. Select first or second half of the night. deadline (30/10)*.

iv. planned observations at OPD (30/10).

iv. final data reduction with calibration, magnitudes and error analysis (20/11)*

v. final partial report with ColorxColor and CMDs diagrams (U-B) x B and (U-B)x(B-V). Comparison with literature data with uncertainties and limitations (30/11)*

* written partial report due on these dates.