

ASTRONOMICAL OBSERVATIONS & co.

This part depends on the possibility to have funds (AFC hours) by the Department of Physics, availability of OATS/INAF instrumentations, and funds of Profs. of Astronomy-Units of the Dept, Consorzio per la Fisica,...

To be performed at SVAS (Basovizza - OATS/INAF) in collaboration with Dr. Giulia Iafrate.

1 night to explain instrumentations, acquisition of images, RGB images of astronomical objs. A possible visit to the big telescope in Cupola.

1 night to acquire many images of a variable star to construct the light curve (a **LONG-TERM HOMEWORK** of the Photometry Part of the course).

PREVIOUS Observational-HW: you have to propose possible targets: $\Delta M > 0.5$ mag, $T < a$ few hours, visible in that period at that time (19:00/20:00....24:00), and AS USUAL IN PHOTOMETRY avoid to be near a very brilliant star! You can use www.aavso.org, and <https://www.aavso.org/vsx/index.php?view=search.top> to have an idea of typical mag.

1 night to acquire images of several just exploded SNs. PREVIOUS Observational-HW: you have to propose possible targets: recent, bright, visible SN (subj. Of a HW in Photom.). You can use:

<http://www.cbat.eps.harvard.edu/lists/RecentSupernovae.html>

http://www.cbat.eps.harvard.edu/unconf/tocp_ra.html

<http://www.rochesterastronomy.org/snimages/>

2 day-hrs dedicated to Sun observations.

3-5 day-hrs dedicated to virtual Radio observations using the SALSA telescope to study the kinematics in Milky Way as traced by neutral H (the subject of a **LONG-TERM HOMEWORK**). Theoretical info and software for spectra reduction in: https://github.com/varenius/salsa/blob/master/User_manual/English/SALSA-USERMANUAL_English.pdf?raw=true <http://vale.oso.chalmers.se/salsa/software>

2-4 hrs dedicated to use Aladin and Stellarium softwares.

+ 4 nights & days to be performed at Cima Ekar in Asiago (OAPD/INAF) based on the approved proposal of G. Iafrate et al. "Misure di estinzione e arrossamento in nebulose oscure" and on the collaboration of G. Iafrate/ C. Bohem/ OATS-INAF. This part can be the subject of a **LONG-TERM HOMEWORK**, too.