Deadline for lab report: Monday, September 25, on or before 5 pm. Upload to the submission portal on Brightspace. Your lab report should be a single document, include a good quality photograph of your TA signature, and be in PDF or docx format.

IMPORTANT: All answers should be in your own words. No direct copying and pasting, this includes images from your research. Take good-quality photographs of sketches done by hand and include these in your report.

Last night was an excellent night for observing! For your night lab reports, for Parts of a telescope (Station 1) and Constellations (Station 2) please write an objective (a few sentences) and answer the questions given in the manual based on the information given during the lab. Do extra research for any required additional information. Also the free online app Stellarium is a useful resource. Please see the cheat sheet about its use which has been uploaded to Brightspace.

Browser-based Stellarium: https://stellarium-web.org/ (sufficient for the lab) (or if you want to get ~\*Fancy\*~ / are interested) Stellarium application: https://stellarium.org/

## **Station 3: Celestrons**

**Moon:** To answer Questions 10-12 about the moon, research how the moon would appear in two weeks (October 2) at 9:30 pm (21:30) from Victoria, with the naked eye using Stellarium. Sketch, then research how it would appear through an 8" Celestron (moderate sized amateur telescope) and sketch again. Include date and time of (simulated) observation, and answer the questions.

**Planets:** (Q13-15) Everyone should have an observation of Saturn, some students who had their Celestron session later in the evening may have been lucky enough to observe Jupiter as well! Either (or both) observations are sufficient to answer the relevant questions in the manual.

**Stars:** (Q16-20) Everyone should have observations of Vega (or Arcturus) and Albireo, which are needed to answer the questions.

## Station 4: DFM

(Q21-22) Everyone should have observed and sketched the following objects: Globular cluster, M13 (Hercules globular cluster)
Open Cluster, M11 (Wild Duck open cluster)
Planetary Nebula, M57 (Ring Nebula)
Galaxy, M31 (Andromeda galaxy)

Please email your TA if you have any questions and submit your labs on time. No late submissions! Don't forget to include a picture of the TA's signature in the lab report.