* **Introduction, including:**

**Thermal noise (Darks)** – darks, affected mainly by components within the imager itself

**Background** – The telescope requires the background for subtraction, ambient (non-intense) regions that include the darks

**Other sources of deviation**

-Wavelength

-Exposure time

-Bias – mainly if times do not sync

**Photometry**

-What is it?

-Literature of constants and known values

* **Step-by-step instructions, including:**

**Data** – Obtain data and header information from .fits files

**Collect and deduce** – Darks and backgrounds

**Normalize** – flats, no units, therefore it is fine to use it for the flux equation

**Conduct photometry** – using techniques in previous labs

-Aperture photometry

-background of a certain aperture with a small standard deviation

**Equations used** – Obtaining correct observation flux using science observations, darks, normalized flats

* **Things-to-check, including:**

**Exposure times**

-Must make sure that the exposure times are equivalent for flux and normalized flats

-gains must be considered if not

**Consider which filter used**

**Background regions**

-Regions must be picked with low standard deviations to ensure extra brightness and stars do not affect the flux calculations

-Ensure that darks must be included with background information

**Cosmic rays**

-Take the mean, or reduce the peak that will be observed with surrounding background

**Compare**

-to flux from already corrected photometry flux from the same sample