

## MONDAY

### Intro to CCD

- Camera
  - Spec is at the back of the camera
  - Bias = images for a sec without shutter open
  - Flat =
  - Linear of CCD = long exposure, long saturation
- COUNTS = number of photons
- Gain =
- Exposure time and linearity
- Dark current
  - More exposure, more dark current to measure.
- Binning - <https://www.photometrics.com/resources/learningzone/binning>
  - improved signal-to-noise ratio (SNR)
  - the ability to increase frame rate, albeit at the expense of reduced spatial resolution.
- SKY SURVEY
  - CADCS - <http://www.cadc-ccda.hia-ihp.nrc-cnrc.gc.ca/en/dss/>
  - SDSS - <http://skyserver.sdss.org/dr15/en/home.aspx>

### Wednesday - THERE'S 6 of US

- A CCD camera (taking picture)
  - How to operate the camera
  - Easy approach, clicking buttons
  - Saving file to ".fit"
- BIAS
  - 0 sec images
  - About 0.12 if you want to compute in the CCD camera software program
  - About 1 picture
  - Make sure is not oversaturated, close lens
  -
- FLATSCREEN
  - According to time
  - Make sure is not oversaturated
  - Take two
    - 1 minute
    - 10 second
  - Look for anomaly if there's one
    - We found one, a circle at below of the images, size of a dime.
- LINEARITY
  - From the 60sec to 0.125 sec
    - We took about 13 pictures
  - Below 0.12 sec does not show much

FRIDAY

- ABSENCE TO CLASS