News

• Lab 2 & 3
  – Handed back next week (I hope).

• Lab 4
  – Due November 2

• Lab 5 (Transiting Exoplanets)
  – Friday, Monday, and Tuesday groups have completed observing. Other groups will continue next week.
  – Due November 16
Filter mixup

- Labeling in CCDSoft had B and R reversed and I and open reversed.
  - I opened up the box and looked at the filters.
  - Checked the photometry in my M31 images of Oct 10.
The effect of passband shifts on SN photometry

Vega, an ordinary star
The effect of a shifted passband will be different for hot and cool stars.
Transformation to Standard Magnitudes

• Thus, the standard transformation equations are:
  – \( B - V = \phi_{bv} + \mu_{bv} (b - v) \)
  – \( V - v = \phi_v + \varepsilon (B - V) \)

  – Here, \( B \) and \( V \) are the standard magnitudes and \( b \) and \( v \) are the instrumental magnitudes.

  – These can be considered first-order Taylor expansions. We will ignore higher order terms (they are usually unimportant).

  – The \( \mu_{vi} \) coefficient would be 1.0 and \( \varepsilon \) would be 0 if our system matched the standard one.

• Actually differ from these values by 0.1 – 0.3.