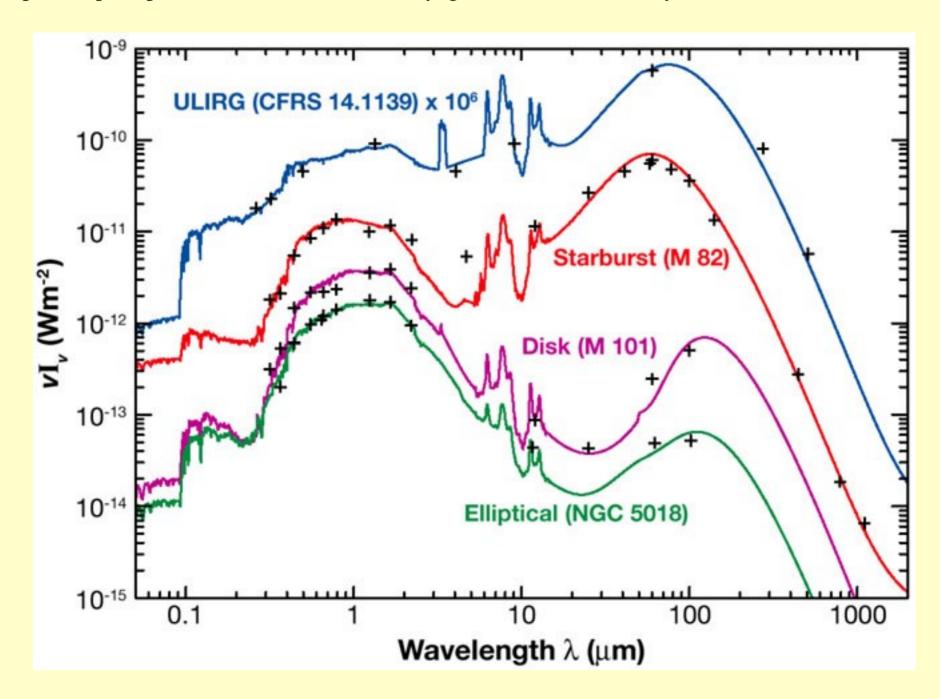
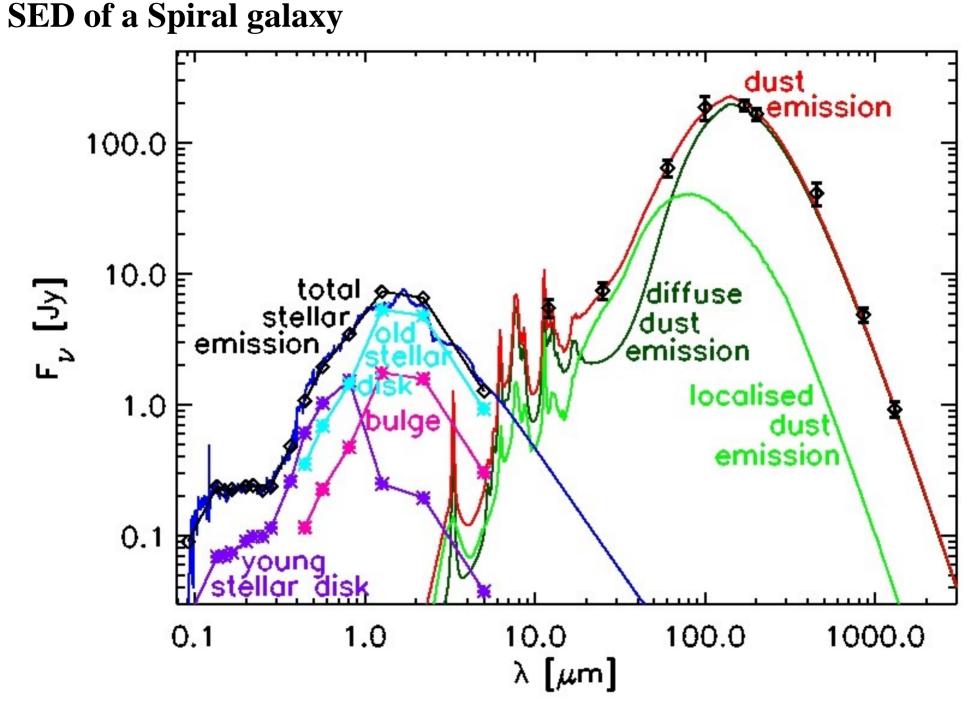
## SED (Spectral Energy Distribution) of different gals

From http://elte.prompt.hu/sites/default/files/tananyagok/InfraredAstronomy/ch10s02.html



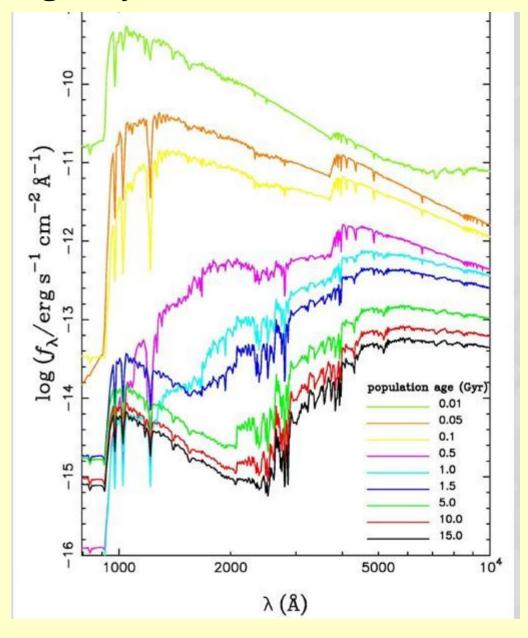


From http://www.star.uclan.ac.uk/~ccp/main.shtml Credit to Popescu et al. 2011

## **Eevolution model for an Elliptical galaxy (E)**

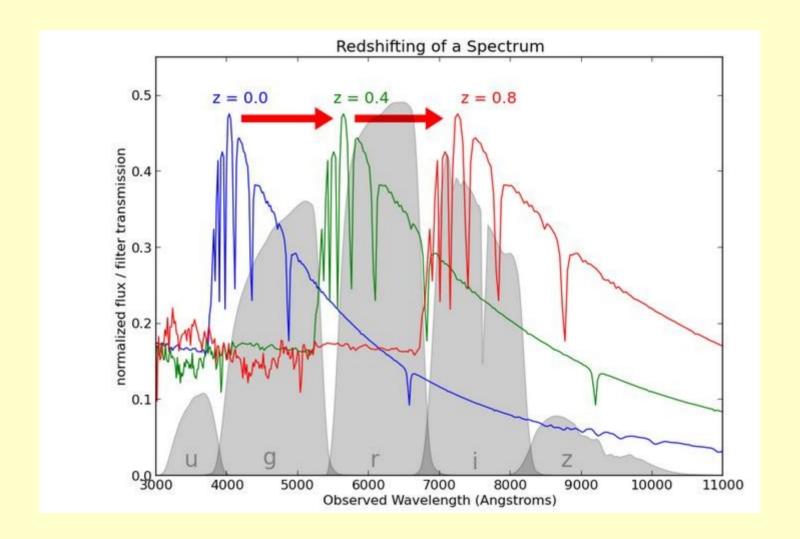
The evolution of spectral energy distribution (SED) of elliptical galaxies. The far-UV part is dominated by hot subdwarf stars from binary interactions when the age is larger than 1 Gyr (Han et al., 2007, MNRAS,

380, 1098).



Credit to http://www1.ynao.ac.cn/~zhanwenhan/bps.html

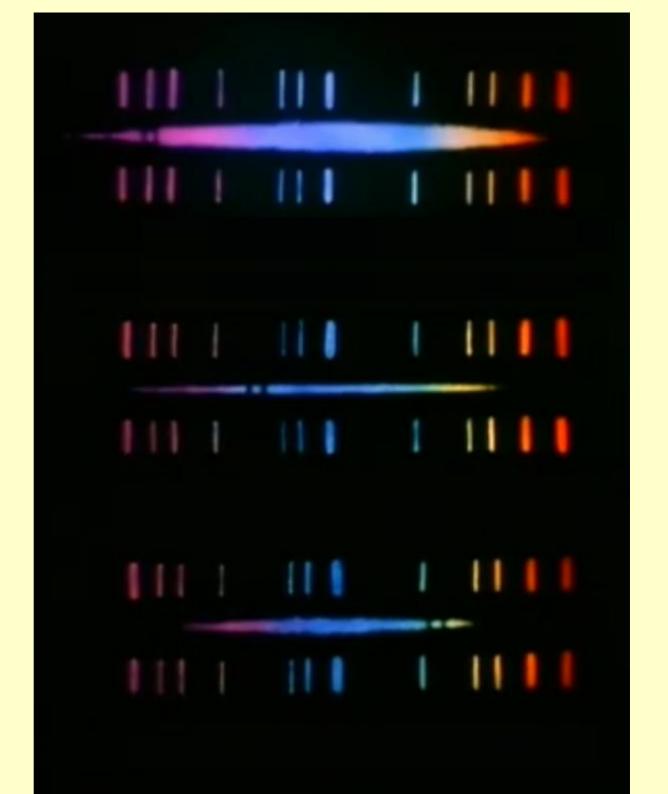
## Vega "redshifted"



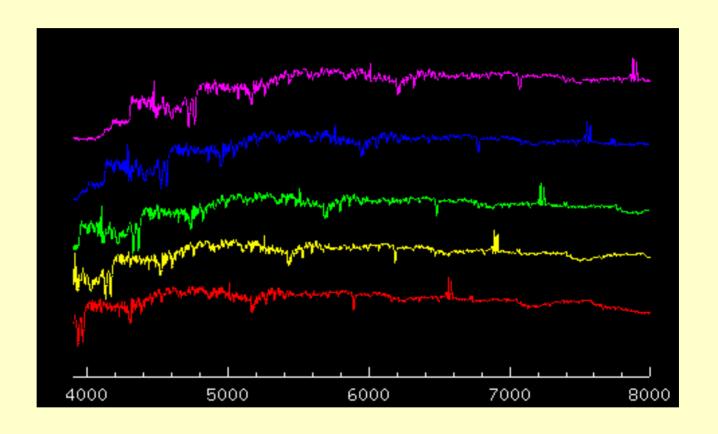
Credit to sckit-learn http://www.astroml.org/sklearn\_tutorial/regression.html

2D spectra Redshifted

Look at the H and K Lines of CaII

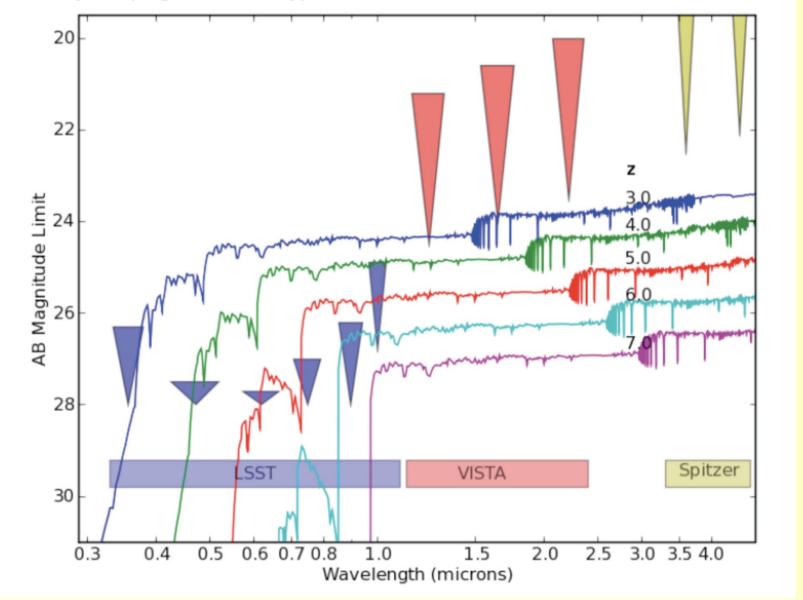


Spectra of E redshifted...
Are you able to estimate z?



## Ly alpha break for different z and instruments (LSST, VISTA, Spitzer satellite)

Fiducial Lyman-break galaxy spectral energy distribution as a function of redshift.



Credit to LSST coll., from https://galaxies.science.lsst.org/projects/demographics