

## Ast 25 week 4b: Useful readings/Homework #06

### Wikipedia readings (don't delve too deeply)

BL Lac objects

[http://en.wikipedia.org/wiki/BL\\_Lac\\_object](http://en.wikipedia.org/wiki/BL_Lac_object)

Active galactic nuclei

[http://en.wikipedia.org/wiki/Active\\_galactic\\_nucleus](http://en.wikipedia.org/wiki/Active_galactic_nucleus)

Quasars

<http://en.wikipedia.org/wiki/Quasar>

Seyfert galaxies

[http://en.wikipedia.org/wiki/Seyfert\\_galaxy](http://en.wikipedia.org/wiki/Seyfert_galaxy)

Radio galaxies

[http://en.wikipedia.org/wiki/Radio\\_galaxy](http://en.wikipedia.org/wiki/Radio_galaxy)

### Homework #06 (5 pts):

Find on-line, authoritative estimates for the parameters listed below. Include the value, and also the url for your reference. (Wikipedia is an acceptable source if it includes citations.) One point per each value.

- 1) The mass of the supermassive black hole at the center of our galaxy.
- 2) The mass of the supermassive black hole at the center of the Andromeda Galaxy.
- 3) The name or designation of the most distant quasar known.
- 4) The distance to the quasar in question #3, given in redshift units (i.e.,  $z = 3.1$ ,  $5.2$ , etc).
- 5) The name of the closest active quasar known, and its distance in light years.