## 10/13/06

Exam 2, Chapters 6, 7, Friday, October 20
Chapters 6, 7 posted - revised, updated for second edition
Movies are now posted on class website, by chapter.
Check chapter 6.

News?
Pic of the day - stars with planets toward the center of the Milky Way, Sagittarius


## Sky Watch Objects mentioned so far

Lyra - Ring Nebula, planetary nebula in Lyra
Sirius - massive blue main sequence star with white dwarf companion
Algol - binary system in Perseus
Vega - massive blue main sequence star in Lyra
Antares - red giant in Scorpius
SN 1006 - Lupus/Centaurus (not this time of year)
SN 1054 Crab Nebula - Taurus
SN 1572 Tycho - Cassiopeia
SN 1604 Kepler - Ophiuchus
Cassiopeia A-Cassiopeia
Vela supernova - Vela (not this time of year)
Betelgeuse - Orion, Red Supergiant due to explode "soon" 15 solar masses
Rigel - Orion, Blue Supergiant due to explode later, 17 solar masses

## Sky Watch

Can only count each objects once for credit, but can do any objects missed earlier in later reports.

Add relevant objects that I don't specifically mention in class, other examples of planetary nebulae, main sequence stars, red giants, binary stars, supernovae....

Don't wait until the last minute. It might be cloudy.
The Earth orbits around the Sun, some objects that were visible at night become in the direction of the Sun, "up" in daylight, impossible to see, other objects that were inaccessible become visible at night. Check it out.

## Kepler

SN 1987A

first naked eye supernova since Kepler's in 1604


Tycho

## Local group



## Large Magellanic Cloud, irregular galaxy (color)



## LMC negative



Rob McNaught patrol photos - the day before


The first known photo of SN 1987A hours after shock breakout


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2-23-87
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## One day later



2-24-87

Near maximum light


About when I saw it


8-23-87

## LMC w/arrow



Photo of progenitor star (giraffe)


## Stars 1, 2, 3



## Close-up

## Supernova 1987A Rings



Hubble Space Telescope
Wide Field Planetary Camera 2

