

Homework 2 Astro421 Due Tues Feb 28
S+G problems 2.4 and 2.5

1) The first half of problem 2.4 : The problem has 3 parts
equal credit for each

The last paragraph of the problem is not relevant to the rest

'(Ψ_{Mv}) is a fairly smooth function, and we have no reason to expect that

$\Psi(Mv)$ will have a kink or change in slope near the Sun's luminosity. Together,
these imply that star formation locally has not slowed or speeded up by more
than a factor of two over the past few gigayears.)

2) The first half of problem 2.5 stop at the part of the problem starting with The Pleiades
cluster.'

3) In a short essay describe the 'ecology' of the ISM in spirals. E.g.

What processes heat the gas and cool the gas.

What are the observable signatures of the phases of the ISM

4) What is the fundamental difference twixt the ISM in spirals and ellipticals? How do
we know?