

# HW070514

due in a week

- Why do astronomers believe that vast quantities of dark matter surround our Galaxy?
- Approximately how many times has the solar system orbited the Galactic center since the Sun and planets were formed?
- The visible disk of the Galaxy is about 100,000 ly in diameter and 2000 ly in thickness. If about 5 supernovae explode in the Galaxy each century, how often on the average would one expect to see a supernova within 1000 ly of the Sun?