

## Outline of Part 4

- General Properties of the Solar System
  - Terrestrial, Jovian Planets
  - Comets, asteroids.
- Formation & Evolution of the Solar System
  - Evolution of the Solar System and Terrestrial Planets
- Planetary Atmospheres
- Tides and Rings
  - Earth-Moon System, Jupiter's moons, rings around Jovian planets
- Planetary Collisions (meteors & asteroids)
- Extra-Solar Planets & Search for Extra-Terrestrial Intelligence

# Final Exam Information

- When: 8 am - 9:50 am, Tuesday, December 19
- Where: 135 Reber
- How to study:
  - Look over previous tests, many of the questions will be similar
  - Read through lecture notes AND the book
  - Go over homeworks & try to answer review questions at the end of each chapter
- How to get help:
  - My office hours before the final: Thursday 2-4 pm, Friday 10:30 am - 12:30 pm, Monday 4 - 6 pm in 417B Davey Lab (or by appointment).
  - TA office hours: Thursday 1 - 5:30 pm, Friday 1 - 3 pm in 445 Davey
- What to bring:
  - #2 pencil & PSU ID Card
- Format of Test
  - 100 multiple choice questions
  - Closed book/notes
  - You will not need a calculator

# We believe that our solar system

- A) was ejected from the Sun
- B) began as a flat disk of interstellar dust
- C) began as a slowly rotating spherical cloud of gas
- D) was torn off of another Sun
- E) was torn off of another Galaxy

# Kuiper Belt objects are made primarily of

- A) iron and nickel
- B) carbon dioxide
- C) water ice
- D) rocks
- E) hydrogen gas

## We observe a meteor shower when

- A) when a comet collides with a planet
- B) when two comets collide
- C) when Earth passes through the orbit of debris off a comet
- D) at the moment when a comet disintegrates
- E) when a large object hits the Earth