

## Agenda

- 2<sup>nd</sup> part of Projects due today (Final due Dec. 8)
- Will cover Chapters 15 & 16 after the break...read Ch. 15 for next week
- Astronomy/Science News
- Messier Objects
- NGC
- Review of Chs. 9 & 10

## Astro news: Colored Bubbles



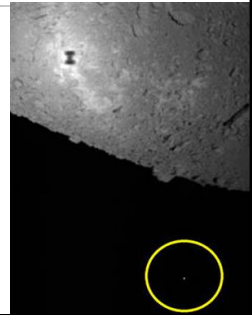
## Astro news: Colored Bubbles

- <http://www.popsci.com/popsci/science/0a03b5108e097010vgnvcm1000004eecbccdrd.html>
- Great story about science as a passion
- Interesting problems:
  - Keep the color from falling down
  - Keep the color from staining after pop



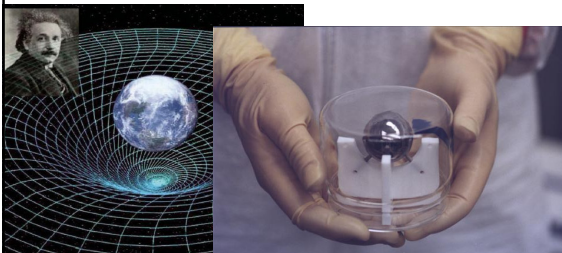
## Hayabusa has problems

- Japanese probe to study asteroid
- Lost contact with robot probe: MINERVA
- Asteroid: Itokawa



## Gravity Probe B

- Looking for frame dragging effect of Earth
- Finished 1 year of taking data

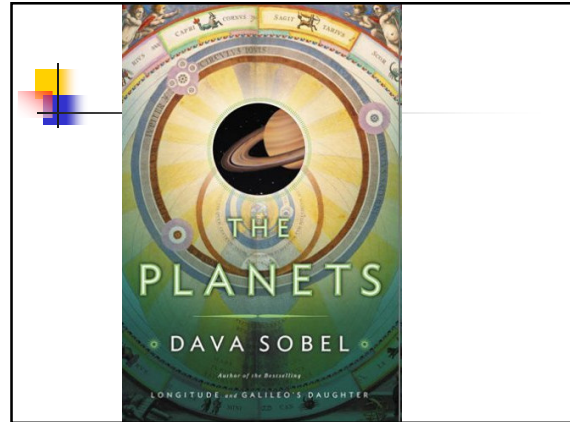


## Another Newton Tidbit:

- He predicted the end of the world!
- In his papers in a Jerusalem library:
  - show Newton's attempts to decode the Bible
  - believed contained God's secret laws for the universe
- Heretic: didn't believe in Holy Trinity (yet he taught at Trinity College!)

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## The Messier Catalog

- set of astronomical objects catalogued by Charles Messier
- Published 1774-1784
- Known by M1 – M110
- Visible w/ small telescopes so popular viewing objects...show up in star charts
- Only Northern Hemisphere objects

## New General Catalog (NGC) Objects

- 8,000 deep sky objects
- 1880's by Dreyer and Herschel
- Includes some Southern Hemisphere objects
- Errors corrected in Revised NGC (RNGC)
- ...Many other catalogs