

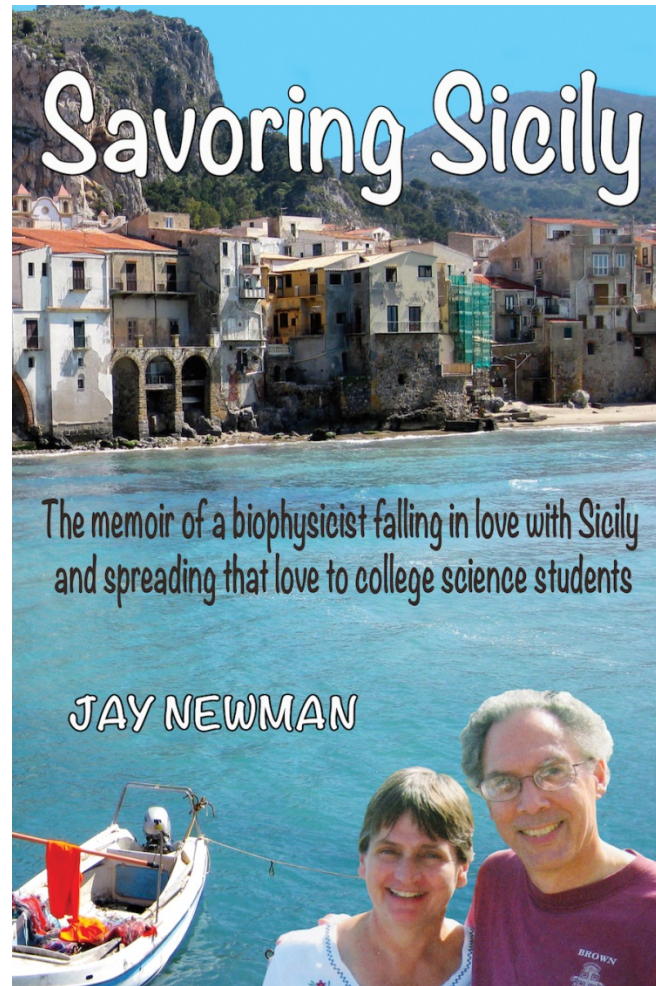
# Physics 110

- Hope to have lots of interaction both in and out of class
- I'm almost always available – e-mail, phone, or just come by
- If you are sick or expect to miss class, drop me an e-mail
- Everyone can do really well but you will need to put in a good and consistent effort
- Check out the course web site – bookmark it and use it often – powerpoint slides posted too – HW solutions on Nexus course site – Lab handouts all posted
- **Help Center** will be set up next week **Tu/Th 7 – 10 PM**
- Remember 4<sup>th</sup> hour of course – I will (and you should) spread out problem solving all week

# Is it Really Greek?



# Advertisement

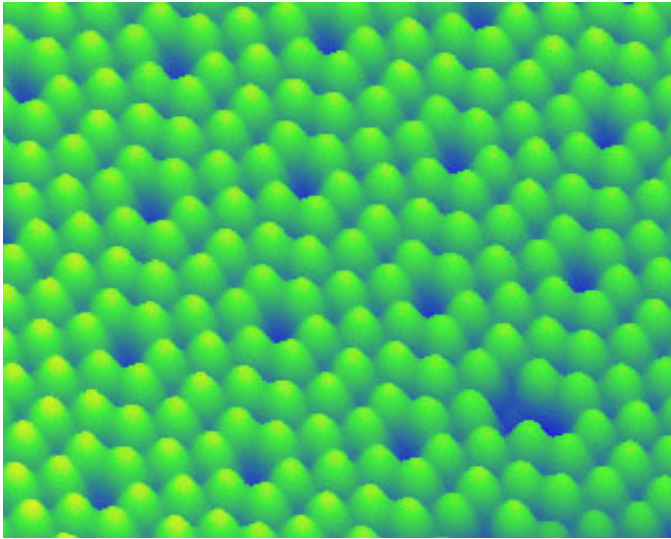


<http://smarturl.it/AmazonSicily>

# Chapter 1

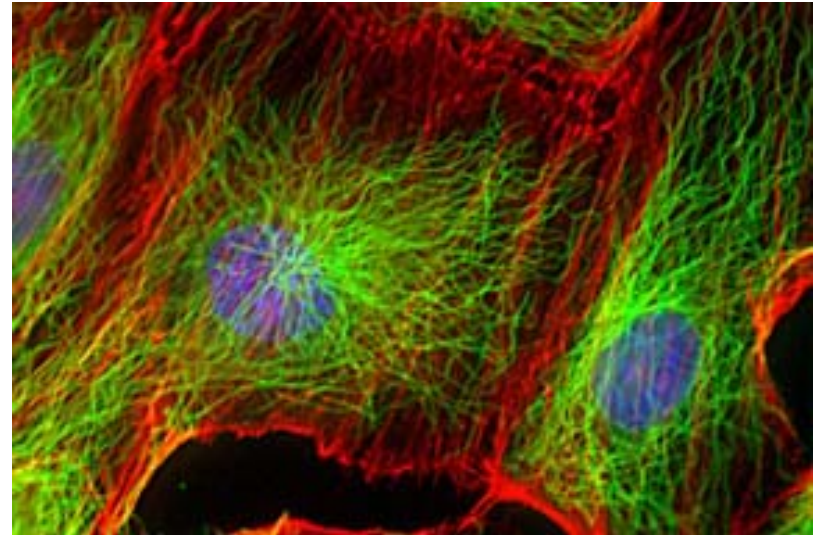
- An overview of the **Structure of Matter**
- Introduce **matter (mass)**

# Atoms



Individual silicon atoms

- Composition
- Size
- States of matter



Fluorescence image of human epithelial cells

Red= actin; green = microtubules, blue = DNA

# Mass, weight

- Mass – kg or amu (dalton) =  $1.66 \times 10^{-27}$  kg
- Density – mass/volume – intrinsic property
- Calculate spacing of atoms from density and atomic weight
- All atoms are about the same size!