

Quantum Physics

May 21-June 4

May 21

- Introduction to [Quantum Physics](#)
- The Scientists involved with the development of QP
- [The Downfall of Classical Theory](#) (Newtonian Mechanics)
- The Experiments that proved Classical Theory inadequate: *BlackBody Radiation - The PhotoElectric Effect - Line Spectra - [The Compton Effect](#)*

May 22

- Is Light a Wave or a Particle? [Wave-Particle Duality](#) *Double Slit Experiment*
- Fabric of the Universe - Video Mind Map (What a great Video! Watch the whole series online!)
- Classical vs Quantum Interpretation of Reality (Look on my website on the note page)
- Visit to my Webpage (Dancing Wu LI Masters, Quantum vs Classical [explanation](#) of Photoelectric Effect)
- [Angels from Time to Come](#) - What are Angels?

May 23

- [Fabric of the Universe](#) - Video Mind Map
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Due on Monday, June 4, 2012 (no Quantum Quiz on Friday) ~ 400 pts

1. Thin Plastic Cover (10 pts)
2. Creative Quantum Physics Cover Page (10 pts)
3. Introduction to Quantum Physics How does QP relate to you? Why is QP important to you? (This is all you!) (20 pts)
4. 7-8 pages of comprehensive, organized, neat notes, useful applications ([1](#), [2](#), [3](#)) with detailed diagrams and complete explanations (not just words). You can use the Internet to get some images but you must create some of your own images. (use the 50/50 rule) (~150 pts)
5. 1 Mind Map (Videos, concepts, experiments, etc.) (30 pts)
6. 2 Article Reports - [Angels from Time to Come](#) and one of your choosing. (80 pts)
Include the Article, Write an Introduction, Explain the important points developed in the article, evaluate the premise of the article, provide a brief conclusion. How does this article relate to Quantum Physics?
Separate from above
Homework - Including the STP questions (100 pts)

Can you do more? YES!! Can you get more than 400 pts? YES!!

Articles

Angels from Time to Come

(<http://sdsu-physics.org/physics180/physics180B/angels/angelsfrontimetocome.html>)

The Meaning of Reality

<http://sdsu-physics.org/physics180/physics180B/chapstuff/baggot.html>

Multiverse or Universe

(<http://www.pbs.org/wgbh/nova/physics/fabric-of-cosmos.html>)

Final Test during Finals Week (300 pts)

Seniors will take the Final on Thursday and Friday May 31 and June 1

1. District Benchmarks (all concepts both semesters) 150 pts
2. Quantum Physics Test 150 pts