

Re: Young's Interference, on the cheap

## Re: Young's Interference, on the cheap

---

*Source:* <http://sci.tech-archive.net/Archive/sci.physics/2006-11/msg01564.html>

---

- *From:* Front Office <YoMo.nospam@xxxxxxxx>
  - *Date:* Fri, 17 Nov 2006 17:48:38 +0000
- 

hhc314@xxxxxxxx wrote:

Bob, then you are an "old fart" like myself. :-)

Actually, you're not quite that old, since the first edition of Halliday and Resnick was copyrighted in 1970, while Sears and Zemansky dates back to 1949. Still, both are excellent introductions to physics for the serious student.

Seems to me I had Sear and Zemansky for thermo. As for H & R, the copyright date in my volumes is 1960 — making me the older fart, maybe.

My H&R volumes are worn out partly because I used to keep them by my bed, along with the Statistical Abstract of the United States and Goodman & Gilman's Pharmacological Basis of Therapeutics, any of which I could study for many hours at a time — purely for a warped sort of late-night obsessive 'fun.'

These days, I also enjoy watching Goodstein's 'Mechanical Universe' series, over and over again. As Feynman once remarked, there are always new insights to be got from the basics.

On a plus note, you've inspired me to visit Radio Shack and pick up one of those laser pointers to play with. My only laser currently is a surplus assembly from an early supermarket scanner that will eventually either electrocute me or zap out my eyeballs! (In my case, having cataract lens replacements in both eyes, I need to be a little cautious. Too much neutron flux in my earlier years...I guess.)

Cataracts, huh. Jeez, maybe you are the older fart.

Great idea, to fool with the cheap equipment. E.g., I have a tiny CCD (~3 mm on an edge) from a Logitech WebCam (or whatever it's called) that I illuminated with laser light coming through a pinhole in a piece of brass shim stock. You can see it at <http://www.flashevap.com/LI.jpg>.

Re: Young's Interference, on the cheap

Re: Young's Interference, on the cheap

I suspect that what looks like interference in the image is actually more like a moire pattern on the CCD elements.

Just to run on a moment longer about science on the cheap, I recently got some sea shells at the beach in Delaware and mixed them with charcoal from my woodstove, then fused it all up with the arc from my welder and made calcium carbide, which can be fun to play with. Aluminum sulfide has interesting properties, too, and you can make it the same way. In fact, while I'm on a cheap-science jag, check out the iron ring that I extracted from the clay in my yard here in Maryland, with the arc welder. Buy one of those, if you want to have some high-energy fun.

Where were you exposed to neutrons? I have some questions about that sort of thing.

Bob

If you want, Harry, write to me at armistead\_rap[AT]bigfoot.com remove the "[AT]," of course.

b

Front Office wrote:

hhc314@xxxxxxxxx wrote:

Sorcerer, actually I should have steered him to a textbook explaining Young's Experiment rather than some simplist web crap.

A little late, but here are two:

"Fundamentals of Physics", Halliday & Resnick. Page 784.

Good ol' Halliday & Resnick. I've had both volumes for over 40 years now. I consult them often -- so often the cover has fallen off Volume II, the one with page 784. Wonderful set of books.