



THE DILATED TIMES

The newsletter of the Drew University
Society of Physics Students

APRIL, 1992

CALENDAR OF EVENTS

Friday, April 24:

Rochester Colloquium- For your travel pleasure we have arranged a two-day, one night luxurious vacation to...the University of Rochester. This includes student presentations, by names such as our own Steve Gausepohl, and tours of the labs, etc. It's also a great opportunity to meet lots of other SPS'ers--can they really be like us? Cars will be leaving Friday and returning on the order of 10pm Saturday.

Wednesday, April 29:

Banquet- Join us for the annual end of the year banquet held in the Faculty Club room of the Commons. Awards will be given. Dinner will be followed by guest lecturer Dr. Georgia Fisanick of Light Age, Inc.. 6:00 pm.

Sunday, May 3:

Picnic- Fine food and friends, what more could you want?...How about a fierce softball battle? [Just think, Steve, our last SPS activity ever...sigh] Location: Lewis Memorial Park (rides will be arranged).

NEW SPS OFFICERS

President: Bill Kimler
Vice President: Jenn Salus

Secretary/Treasurer: John LaMarr
Activities Director: Amy Perkins

WHY DID I EVER BECOME A MAJOR?

By Steven Gauss-pole

Now that comprehensives are in full swing, I find myself frequently questioning my decision to major in physics. Searching for some explanation behind my masochistic desire to continue on to graduate school, I began to look at my childhood to see if there was some event that sent me down the road to a BA in Physics.

Well, let's see. I grew up in Byram, which is a small town near Newton. When I was young, my father worked as a train conductor in the Battery and my mother worked in Sears, so I was raised by my "Gamma" Gausspole. Gamma was an image of beauty, always decorated in gorgeous joules. What's better, she made an amazing apple pi. She taught me that poynting was

rude and that I had the potential to go as far I wanted in life. Although I do remember a time when I got a little too curious and tried to dye my Kelvin-Klein jeans with her Maxwell House coffee.

When she came home from her part-time job at the town hall effect and saw the mess I had made of her washing machine, she let out a psi, started screaming (much like Frank Einstein) and demanded that I explain watt the hecht I was thinking. She yelled and yelled; even called me an idiot-savart. After that she laid down the laue. While she searched the phonon book for a mechanic, she made me go to the Five and Dyne store to get food for her pets (a boas constrictor, one thousand moles, and a cat that she kept in a closed box.....I never did see that cat).

It wouldn't have been so bad except that the store was on the other side of Wheatstone Bridge, and by the time I got there the store was closed with a sign on the door which read "Gone Fission". As a quick peace offering, I bought Gamma some Reynolds wrap at the supermarket, but that wasn't enough. When I got home, Gamma had already arranged that I live with my Uncle Henry from then on. I tried putting up some resistance and told her that moving would hertz my mental health.

Regardless, I lived the rest of my days with Uncle Henry. He worked as a krane operator and had a "dewar die" philosophy on life. Using his wrecking ball he could turn any building into a pile of plancks in a nanosecond. Sometimes he could be a bohr when he told stories about when Byram was undergoing integration in the 1940's, but overall Henry was a feynman. He always had time to play "symon says" with me or take me for a ride on his otto cycle. I remember riding on the highway one balmer day while listening to Tesla on the radio. Henry even let me drive his cycle the night of my inductance into the National Honor Ssociety.

Now, years later, I am a senior physics major at Drew, but Byram has stayed the same. Sure, the music has changed a little (now kids are listening to EMF and Nirvana's "Snells like teen spirit") but the town is the same. Gamma and Henry were both integral parts of my upbringing, but I can't see how they influenced me to become a physics major. When I look back at Byram now, I just see ohm sweet ohm.

IT MUST BE TRUE...

"In principle, the force that drives the charges to produce the current could be anything-- chemical, gravitational, or trained ants with tiny harnesses."

--Griffiths, Electrodynamics p270.

"When you don't know it's Friday, you know you need it TO BE Friday!"

--Jim Supplee

"Momentum never sleeps." --Pat Boeshaar

"If it blows up then it's obviously not very useful." --Dr. F

"O.K., I've never seen an atom, so you can model it however you want."

--Jim Supplee

"If you let go of the glop of charge, it goes whssh and flies away--and does work for you." -- Dr. Fenstermacher

"Let me rephrase your question and then I'll bet I don't know the answer."

--Jim Supplee

"[We're going to skip chapter seven but] you might enjoy turning the pages."

--Jim Supplee

"I can make it go to zero. I have the power to do that." --Pat Boeshaar

ORIGINAL THOUGHTS:

Leith: "Where are you going to grad school, Randy?"

Randy: "Well, I figure anyone who sends me a Baskin-Robbins coupon package...."

"God, I hope I'm learning something useful here..." --Heather, muttering to herself as she studies for a Math 17 quiz

BIRTHDAY FEATURE

Pieter Zeeman (b. May 5, 1865)

Zeeman studied the effect of a magnetic field on light for his doctorate at Leiden University. In 1896 he discovered that the spectral lines of certain elements are split into three lines when the sample is in a strong magnetic field perpendicular to the light path, while if the field is parallel to the light path the lines split into two. This effect is now called the "normal Zeeman effect" and can be explained using Bohr's theory of the atom. In general, most substances show an "anomalous Zeeman effect" where the splitting is into several closely spaced lines. This phenomenon can be explained using quantum mechanics and the concept of electron spin.

Zeeman was a meticulous experimenter. He confirmed, through measurement of the speed of light in dense media, Lorentz's prediction that this speed is related to wavelength. He and Lorentz received the Nobel Prize in physics in 1902 for their work on magneto-optical effects.

(Taken from the Biographical Encyclopedia of Scientists, Vol. 2, 1981)

PHIRST-YEAR PHYSICS PHILES

--Craig Watson

Wow! I am done with one entire semester! Though I am still a phreshman, I feel older and more dignified. I can actually give people directions around campus and be pretty sure that they'll get were I tell them. Physics 11 was a great class. I never complained that I missed lunch, got totally lost trying to do the tricky integrals, or needed a towel to wipe the sweat off of my brow during the exams. I won't even mention the impossible homework problems which were in blue print. And of course, these always seemed to be even numbers.

Honestly, I really did enjoy phirst semester physics. I must object to one concept, though-- this "Right Hand Rule." Why do we lefties always get the short end of the (meter) stick? Who came up with this rule anyway? I think I will make a new rule called the Left Hand Inverse Rule, where you use your left hand and simply take the direction to be opposite your thumb. This Right Hand stuphph is prejudicial.

Physics 4 lab was really neat, too. We got to use all kinds of equipment ("toys") and machinery. My favorite was the air track. We used this simple apparatus for so many things--I could not get over its usefullness. The best lab was the conservation of momentum experiment. It was like organized and calculated bumper cars! The practical exam was fun, too. I was so excited when I had to perform an airtrack experiment. I knew I'd ace that section. The only problem was that I was so excited my hands were shaking (this also had to do with my anxiety over the whole exam). As a result, I dropped my airtrack glider on the floor. Crash!! Bang!! I thought Dr. Fenstermacher would fail me right there. Luckily, I managed to pull through and finish with time to spare.

Overall, I had a great phirst year physics experience. I just hope that I don't electrocute myself this semester in Physics 12--E&M.

HERE SOMETHING YOU DON'T SEE EVERY DAY



Steve prepares for pair annihilation as his collision with the anti-Steve is imminent. (Are the laws of conservation of energy, momentum, and strangeness valid here?)

[Photo courtesy of Ms. Cynthia Meredith, on location in New York City]

D.F.