



THE DILATED TIMES version 3.0

*The newsletter of the Drew University
Society of Physics Students*

February 1993

*Upcoming Events: February 15 4:00 PM Mike Berry - Tantalum Silicide Variable Capacitance
Rotary Micromotors - Design and Fabrication*

*March 2 4:00 PM Jonathan Reichert - Introductory E&M Reconsidered -
The TALMUD EFFECT*

March 15 4:00 PM Jim Supplee - Intro to FM Spectroscopy

All talks given in Hall of Science 244

QUOTES OF THE ISSUE

Here are a few gems from two of our favorite professors! To all SPS members: keep your ears open to catch some classic quotes from your teacher. Submit these either to Bill Kimler or John LaMarr for future publication.

Jim Supplee:

- This isn't a proof, it's a post-facto realization!*
- If I add these equations the cutest thing happens...*
- Here I can write whatever I want because I've got the chalk.*
- Great! You've got Newton's Second Law. You push it - it moves!*
- I wish I could make t (time) constant someday.*
- Some of you got semi-snagged...*
- Let me write this down ... before I fall down.*
- If the Wednesday section of lab got a different value from the Tuesday lab we'd have to close the Physics department!*
- If you can't solve an equation put a box around it and it's alright.*

Alan Candiotti:

- (to John LaMarr) You were almost right, you were just on the wrong end of the world.*
- Infinitely small is Santa Claus. (???? I'm not sure what this means but he did say it in class.)*
- There is a number which is its own cosine. It's different than being your own grandmother.*

BOOK REVIEWS

*by
Amy Perkins*

This winter break was a good time for me to get caught up on all those extra books I've been gathering to read on my free time.

I started with the book I received as a present at the physics taco party, Tuva or Bust!. This is an account of Richard Feynman's dedicated quest to reach a remote state in the Soviet Union. The book is written by Richard Feynman's dear friend and partner in this endeavor, Ralph Leighton. He and Richard Feynman were drawn together by their passion for drumming and would meet weekly for drumming sessions. During a break in one of those sessions Feynman jokingly asked, "Whatever happened to Tannu Tuva?" As a child Feynman remembered collecting some strange and triangular-shaped stamps coming from this country near Outer Mongolia. This causal question started these men on a ten-year search for a way to visit this exotic spot.

You don't have to be a physics major to enjoy this story about the Nobel Prize-winning physicist. Tuva or Bust! is a book filled with adventure, camaraderie, frustration, zaniness, and bittersweet memories. I recommend this book for your next free moment away from assigned reading and problem sets.

Very high on my list of must-read unrequired reading is a new book called Absolute Zero Gravity by Betsy Devine and Joel E. Cohen. Clearly written on the front cover is a precise description of its contents. "A collection of jokes, anecdotes, limericks, and riddles revealing the funny side of physics, biology, mathematics, and other branches of science." Hmmm.... Very interesting.... Chemistry was not even mentioned. Please make note what wonderful science was given first priority in the listing (Craig).

There are numerous physics jokes and I'll share this one with you:

How many high-energy experimentalists does it take to change a light bulb?

Two hundred, 136 to smash it into subatomic fragments and 64 to analyze them.

How many high-energy theorists does it take to change a light bulb?

Sorry--would you repeat the question?

(Editor's Note: I don't get it.)

I gave this book to John, so undoubtedly he will regale you with others in future publications.

I have the saved the VERY BEST for last. For all intellectual perusers I strongly recommend the one and only The Indispensable Calvin and Hobbes by Bill Watterson. What more needs to be said??

This next item was found on one of the newsgroups my roommate reads. I've edited it a little, but I swear that the original meaning is still intact. As far as what it is....I like to call it:

WHY WE STILL NEED PHYSICISTS

or

WHAT'S WRONG WITH THIS PICTURE?

FREE-ENERGY TECHNOLOGIES

For decades, the various energy companies have been COLLUDING with each other, [and probably also with the national and international bankers, governments, news media, "scientific" establishment, and "education" systems], to successfully ignore or even SUPPRESS several kinds of "FREE-Energy" technology. Government intervention is needed to stimulate research, development, and mass production of these technologies.

Free-Energy devices probably do not create energy, but rather tap into EXISTING natural energy sources by various forms of induction. Unlike solar or wind devices, they need little or no storage capacity, because they can tap as much

energy as needed whenever needed.

For example, at least three U.S. patents (#3,811,058, #3,879,622, and #4,151,431) have so far been awarded for motors that run EXCLUSIVELY on PERMANENT MAGNETS, apparently tapping into energy circulating through the Earth's magnetic field. The first two require a feedback network in order to be self-running. The third one, (as described in detail in "Science & Mechanics" magazine, Spring 1980), requires critical sizes, shapes, orientations, and spacings of magnets, but no feedback. Such a motor could drive an electric generator or reversible heatpump in one's home, year round, FOR FREE.

During the 1930's, an Austrian civil engineer named Viktor Schauburger invented and partially developed an "IMPLOSION TURBINE" (German name, "ZOKWENDLE"). As described in the book "A BREAKTHROUGH TO NEW FREE-ENERGY SOURCES", by Dan A. Davidson, 1977, water is pumped by an IMPELLER pump through a LOGARITHMIC-SPIRAL-shaped coil of tubing until it reaches a CRITICAL VELOCITY. The water then implodes, no longer touching the inside walls of the tubing, and drives the pump, which then converts the pump's motor into an electric generator. The device seems to be tapping energy from that of the Earth's rotation, via the "Coriolis effect", LIKE A TORNADO.

A fourth type of Free-Energy device is the "McClintock AIR MOTOR" (U.S. Patent #2,982,261), which is a cross between a diesel engine (it has three cylinders with a compression ratio of 27 to 1) and a rotary engine (with solar and planetary gears). It burns NO fuel, but becomes self-running by driving its own air compressor. This engine also generates a lot of heat, which could be used to heat buildings. [David McClintock is also the REAL original inventor of the automatic transmission, differential, and 4-wheel drive.]

Crystals may someday be used to supply energy, as shown in the Star Trek shows [Note: I always look to Star Trek when I'm making legitimate scientific claim, don't you?], perhaps by bombarding them with a beam of particles from a small radioactive source.

One other energy source should be mentioned here, despite the fact that it does not fit the definition of Free-Energy. A Bulgarian-born American Physicist named Joseph Maglich has invented and partially developed an atomic FUSION reactor which he calls "Migma", which uses NON-radioactive deuterium as a fuel [available in nearly UN-limited quantities from sea water], does NOT produce radioactive waste, can be converted DIRECTLY into electricity (without energy-wasting steam turbines), and can be constructed small enough to power a house or large enough to power a city or spaceship. And UN-like the "Tokamaks" and laser fusion monstrosities that we read about, Migma WORKS, already producing at least three watts of power for every watt put in. ["New Times" (U.S. version), 6-26-78, pages 32-40.]

Robert E. McElwaine
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If you would like to read more by Mr. McElwaine I believe he has a fascinating exposition on God incarnate on bit.listserv.phys-stu (a newsgroup available through gamma).

And last but certainly not least our wayward son, Craig, contributes yet another installation of:

CHEMISTRY CORNER

It has hit me. I am afflicted with a horrible plague. I am suffering from the frightening disease called PHYSICS WITHDRAWAL SYNDROME (PWS). "Not me." I thought as I made out my schedule last semester "I won't feel the emptiness of living without a Physics course." Well, I was wrong. I miss the fun classes with Dr. Supplee jumping up and down and demonstrating to us first hand all of those principles in the text. I miss the problem sets. I even miss those corny Physics jokes.

I thought that concentrating on Chemistry as my central science would ward away those Physics pangs and yearnings- but this is not so. I have found that trying to count Carbon atoms is not as fun as shooting projectiles or hooking up circuits.

I must make a concession: Physics is indeed as important as Chemistry. It is like the old saying "You don't know what you've till it's gone."

[Note: It's good to see that my previous suggestion for professional help did not go unheeded.]

Please send any comments, suggestions, or submissions to JLAMARR. I need to hear from you guys in order to give you the kind of newsletter you want.

Just as a bit of nostalgia, this is the last first issue of the semester Bill will be ever be getting. I don't know about you guys, but I'm all misty eyed. So everyone be nice to Bill, this is probably pretty traumatic for him.

See you next time.