THE DILATED TIMES

The newsletter of the Drew University Society of Physics Students

MAY, 1990

BANQUET DEFIES GRAVITY!
by Steve Gausepohl

Yet another year has passed, leaving SPS with memories such as an overnight trip to Washington D.C., countless Nova specials, and a Freeman Dyson lecture trip riddled with car problems. What better way to wrap up such an active calendar than with a formal banquet/award ceremony/lecture.

SPS held its annual dinner on April 25 in the rear faculty lounge part of the commons. There was a student/faculty mixer downstairs complete with wine and soda. Entertainment was provided by a sparrow who didn't notice the plane of glass separating the inside of the commons from the outside. Lucky for the bird that SPS has some Bio people in its membership.

Next, it was upstairs for the dinner. Members talked about recent exams, problem sets, and course offerings while enjoying an interesting display of culinary improvisation supplied by Seilers. Dinner was capped off with coffee, tea, and Black Forest cake.

After dinner, a new member of Sigma Pi Sigma was inducted. Sigma Pi Sigma is the National Physics Honor Society, and the new member was Greg Ciresi. Just a few standard speeches, a slide presentation, a signature in a log book, and Greg was the newest inductee.

On a lighter note, gag awards were presented to deserving members. Mike Kelly and Jon Spanier gave awards ranging from "The Visible Spectrum" (awarded to Jamie Brustlin) for dedicated attendance to all SPS functions (well maybe not all, but some.. at least a few. Jamie who?), and "The Iron Man" (given to Dr. Fenstermacher) awarded for the most credit hours taught by a single member of the Physics Department.

Three other awards, of a more serious nature were presented. The Ciba-Geigy Award in Science, more specifically in the field of Physics, was awarded to graduating senior, Mike Kelly; The Arnold S. Boxer Memorial Award in Physics was given to recent Sigma Pi Sigma inductee, Greg Ciresi; and The John F. Ollom Prize in Physics, for the most promising emerging physics major, went to newcomer Steven Gausepohl.

Lastly, the evening ended on a bang, as Gordon Thomas, from AT&T/Bell Labs in Murry Hill, gave an outstanding demonstration on superconductivity theory. Leading his audience through a step-by-step thought process, including experiments complete with liquid nitrogen and magnets, Thomas quickly brought SPS to an empirical understanding of superconductivity. By the end of the demonstration, a superconducting disk was at approx. 72°K and a magnet was hovering in mid air. Wow, what an ending!

Newly-elected 1990 - 1991 SPS Officers

Mike Richichi - President	x4404	CM 1411
Sandy Sweller - Vice Pres.	x4275	CM 1750
Steve Gausepohl - Sec/Treas.	x5645	CM 593
Greg Ciresi - Activs. Dir.	x4347	CM 376

*** * * SPS EVENT!!! * * ***

The 22nd Annual SPS Spring Picnic will be held on Saturday, May 5 1990. We will gather at 10:30am in Hall of Sciences parking lot and car pool over to Lewis Morris County Park for a day full of fun and relaxation before finals are once again upon us. Highlights of the day will include the big softball game (so bring your mitts!), free-lance frisbee, and, of course, Dr. F's famous burgers. If you plan to attend, please return the form you received in your mailbox by Thursday, May 3.

QUOTE OF THE MONTH

"Life is too short to write with pens without ink." --Dr. Fenstermacher

DREW SPS TRAVELS TO WASHINGTON

by Mike Richichi, V-P

While many of you were still stuffing your face with the old Easter ham, a group of five students (Mike Kelly, Jon, Sandy, Leith, and myself) and two faculty members (Dr. Fenstermacher and Dr. Carter) were on their way to Washington for a zone meeting held in conjunction with the APS Spring Meeting. We got in Sunday night, checked in, relaxed and talked a little, and Mike Kelly practiced his talk on periodic perturbations of planetoids.

We then walked to the convention hotel and to the zone meeting. The morning was filled with student papers, ranging from Mike's asteroids, to talks on photon mass, and chaos. A total of 7 talks were given. We then broke for lunch, and came back for the announcement of the winners. Our own Mike Kelly garnered an honorable mention for his talk. We then listened to Dr. John Toll give a talk on the search for the fundamental particles and forces of nature. The talk was good, giving a general overview without being too mathematical or detailed. We then had an informal reception where we could meet Don Kirwan, Executive Director of SPS, and also meet with students from other schools. I talked a good while with the contingent from University Of Maryland about their activities and things. I also bumped into an old friend of mine from middle school who is now president of the SPS chapter at William and Mary. After the reception, we all went off to other talks. An interesting talk was one involving Maxwell's development of his famous equations and also the historical context of it. It was very animated, with people shouting their opinions and questions across the room in a friendly manner. After that, we all got back together, ate dinner, and returned to Drew.

I would say the meeting went well overall. It was interesting, I got to meet people from other schools (important being AZC and all that), and seeing the talks made me all the more eager to give one of my own someday.

AND THEY'RE OFF!!!!!

compiled by Sandy Sweller

So it is almost here..finally! Sunshine, warm beaches, and *oscilloscopes*!!! Well, perhaps for some of us. Here is a partial list of what some of your fellow SPS'ers will be doing this summer:

DR. BOESHAAR has a very busy summer ahead of her. In June, she will working at Bell Labs on the spectroscopy of red stellar sources. In July, her work will take her half way around the world to Australia, New Zealand, Fiji, and Micronesia. Finally, she will spend August at the Canada-France-Hawaii Telescope Institute at Mauna Kea as a research visitor.

DR. CARTER will be taking a short vacation to Cape Cod in June, after which he plans to continue his research on underwater acoustics. His other projects for the summer include preparing material for the Math/Physics class he will teach in the fall, and, of course, brushing up on his backswing.

DR. FENSTERMACHER will be trying to catch his breath after a very busy semester. He will be taking a vacation, and once again he will also be working with the New Jersey Governor's School held here at Drew.

DR. SUPPLEE will be doing research in June and July on Frequency Modulation Laser Absorption Spectroscopy. During the month of August, he will be teaching courses in modern physics at the N.J. Governor's School in the Sciences.

ALAN BLAKELY will be doing research with his graduate professor this summer. In the fall, he is off to graduate school at the University of California at Davis.

GREG CIRESI will be doing underwater acoustics signal processing at the Woods Hole Oceanographic Institute, Woods Hole Massachusettes under the direction of Josko Catipovic.

LEITH DWYER is off to sunny Nantucket to do a little star gazing this summer. She will be doing research and public relations work for the Maria Mitchell Observatory.

STEVE GAUSEPOHL will spend his summer in beautiful, nearby Morristown working for AT&T through a temp agency.

MIKE KELLY will spend his summer gearing up for graduate school and working as a Governor's School counselor. In the fall, he is off to Notre Dame.

MIKE RICHICHI will be probably be working at the Drew Academic Computer Center through July. During August, he will be a counselor for the N.J. Governor's School in the Sciences. He will also begin studying for the GRE's and try to fit some fun into his busy schedule.

JON SPANIER will spend his summer in search of employment (Good luck, Jon!)

SANDY SWELLER will be spending her summer on the island of Nantucket doing

research for the Maria Mitchell Observatory and teaching astronomy to second graders. She also hopes to have fun and get a tan in her infinite free time.

SHARI ULDRICH will spend part of her summer here at Drew working as a Governor's School counselor in August.

Suggestions? Ideas? Comments? This is OUR newsletter, so please help make it work. Send your messages to: Sandy, Box 1750. Thanks!

Editorial Staff of The Dilated Times:

Leith Dwyer, Steve Gausepohl, Bill Kimler, Mike Richichi, Sandy Sweller.

BIRTHDAY FEATURE

Pierre Curie (May 15, 1859 - April 19, 1906)

On May 15 we will celebrate the birthday of the very famous French physicist, Pierre Curie. Curie was educated at the Sorbonne where he was later appointed professor of physics in 1904.

During his early career, Curie's work focused mainly on magnetism and crystallography. In 1880, with the help of his brother Jaques, he discovered piezoelectricity. His wife, the famous Marie Curie, later used his discoveries in her work with radiation.

Pierre Curie's second major discovery involved the magnetic properties of substances, which he was studying for his doctorate. In 1895 he showed that a material will lose its ferromagnetic properties at a certain critical temperature unique to the substance. This temperature is now known as the Curie point.

Although he suffered from severe radiation sickness, interestingly enough this was not the end of poor Pierre. His life was sadly cut short one day in April when he slipped while crossing a street in Paris, fell under a passing horse carriage, and was kicked to death. (The burning question remains: "Why did Pierre cross the road?" - Perhaps to catch the quantum chicken?)

Pierre and Marie Curie shared a Nobel Prize in physics in 1903 for their work investigating radioactivity. The Curies' daughter Irene Joliot-Curie continued their research and received a Nobel prize with her husband.

FINAL EXAM	STUDY SCHEDULE
8:00-11:00 AM	STUDY PHYSICS
11:00-12:30 pm	EAT PHYSICS
12:30 - 5:00 pm	STUDY PHYSICS
5:00 - 5:30 pm	BREATHE
5:30 - 11:00 pm	STUDY PHYSICS
11:00 - 11:05 pm	Study Engl., Fren, Poly Sci, Anth
11:05 pm - 6:00 AM	DREAM PHYSICS

by Steve Gausepohl