SPS EVENTS

March 18 Monday
HS 244
Dr. Griffith, the acclaimed author of the Electricity and Magnetism textbook currently used at Drew, will give a talk on "A Folk History of Sub-Atomic particles: From the Muon to the Gluon". This rare opportunity to see and speak with Dr. Griffith will be something to tell your grandchildren about!

April 9 Tuesday
Elections for the 1991-92 SPS Executive Board will be held. Come on out and vote for your favorite Physics people.

Keep your calendar open for....

- April 13 Saturday
  Spring Saturday - Help recruit those PF’s

- May 1 Wednesday
  SPS Banquet - Get all "gussied up" for a dinner with SPS. The evening will include Sigma Pi Sigma inductions and other award ceremonies.

- May 4 Saturday
  SPS Picnic- Put all those projectile motion problems to use in the annual Softball Game. The usual picnic stuff will be there also, so count on bringing an appetite.

ATTENTION MEMBERS

Applications for Sigma Pi Sigma (the SPS Physics Honor Society) are now being accepted. In order to qualify, a student must:

1) be a member of SPS.
2) have taken at least two upper level physics classes (anything above Chem/Phys 14 would count).
3) hold a 3.0 GPA in the physics courses taken and in overall academic performance.

If you meet this criteria, please give your name to Dr. Fenstermacher (HS-201 X3371) so the proper paperwork can be filled out. The induction ceremony (the SPS Banquet) is not far away, so time is a factor.
QUOTE MATCH-UP  Edited and compiled by Greg Ciresi

See how well you know the faculty here at Drew. Enjoy hours of fun while you match each mind-boggling quote with the PhD who said it.

1) "Today I'll lecture like a maniac."  ____ J. Supplee
2) "I don't remember doing this, but it's in my handwriting."  ____ J. Supplee
3) "You know what 'y' is... it's 'y'."  ____ A. Carter
4) "The problem has nothing to do with Quantum Mechanics, but it does."  ____ J. Supplee
5) "Is this going to wind up in the newsletter?"  ____ J. Supplee
6) "It might look more impressive to your friends and relatives in shorthand matrix notation."

SPECIAL FEATURE  THE CORRESPONDENCE PRINCIPLE OF COFFEE  
-by Randy Jensen

How is coffee related to Physics? What possible connection could there be between "the pursuit to unlock the secrets of the Universe" and "a hot bitter beverage"? Throughout the past thousand years, history has continued to record the scientific accomplishments of the Human Race and it should come as no great surprise that coffee, the indispensable study aid and Physicist's friend, has walked hand in hand with our discoveries and inventions.

The first historical record of coffee was made in the year 1000 A.D.. It was reported of exist by an Arabian philosopher and physician named Avicenna. In the same year the Venetian glass making system was developed. Glassware has proven to be invaluable to laboratory scientists throughout the ages. One might notice that under certain circumstances glassware can also be used to hold coffee.

In the year 1808, Benjamin Thompson, and Anglo-American administrator and scientist, developed the first coffee pot (with a built in metal sieve). At the same time, Ralph Wedgwood introduced a useful tool known as carbon paper.

1908 saw the birth of the Filter Coffee machine, invented in Dresden, Germany by Frau Melitta Bentz. Is it sheer coincidence that this year also witnessed the creation of the reversible four stroke Diesel engine (Nobel Brothers), the Gyroscopic compass (Dr. Anschütz-Kämpfe), the ductile Tungsten filament (William D. Coolidge), the Solar thermoelectric device (W. Zerassky), and several other incredible scientific inventions?

The year 1933 made coffee even more accessible to the scientific community when Nestle of Vevey, Switzerland, after eight years of research, at the suggestion of the Brazilian Institute of Coffee (yes, there is such a thing), came out with Instant Coffee. This was the same year that Otto Hahn and Fritz Strassman came up with a process known as Nuclear Fission.

One of the most impressive years in which to observe both coffee and science is 1952. It was in that year that Bill Russell and Peter Hobbs of Croydon, UK, invented the first fully automatic Electric Coffee Pot. This complicated and elegant device was introduced in the same year as several other new scientific developments, such as the Bubble Chamber (Donald Arthur Glaser), Brookhaven National Lab's Cosmotron (3 billion-volt proton synchrotron), Eckert and Mauchly Computer Company's UNIVAC I (universal automatic computer), and of course Edward Teller's Hydrogen Bomb. 1952 was a very busy year.
It may be true that coffee did not play a direct role in the research, design, and construction of the inventions mentioned above. It may also be true that the synchronicity of the developments in the coffee pots and particle physics are purely coincidental. However, it must be conceded that on a certain level, coffee has played a major role in the progress of science. The Correspondence Principle of coffee is defined by a probability. The probability that these inventors drank a great deal of coffee in order to keep working through the night.


BIRTHDAY FEATURE

Albert Einstein (1879 - 1955)

Albert Einstein is considered one of the greatest physicists of all time. He was born in Ulm, Germany on March 14, 1879. He would later in life graduate (class of ’01) from the Swiss Federal Polytechnic School at the age of 22. He was unable to land an academic position after his schooling, so he accepted a job at the Swiss Patent Office in Berne. He used his spare time at the patent office to perform “thought experiments” and continued his studies in theoretical physics.

At the age of 26, in 1905, he published four scientific papers that revolutionized physics. A Nobel prize was granted to him in 1921 for one of these papers that dealt with the photoelectric effect. Of the other three papers, one was concerned with Brownian motion, while the other two explained what is now considered his greatest contribution of all, the special theory of relativity.

(Taken from Raymond A. Serway’s "Physics for Scientists and Engineers", Saunders College Publishing, Philadelphia, 1986)

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If you would like to contribute to next month’s newsletter (e.g. articles, quotes, cartoons, announcements) please contact Steven Gausepohl (X5645 CM 593) at your earliest convenience.