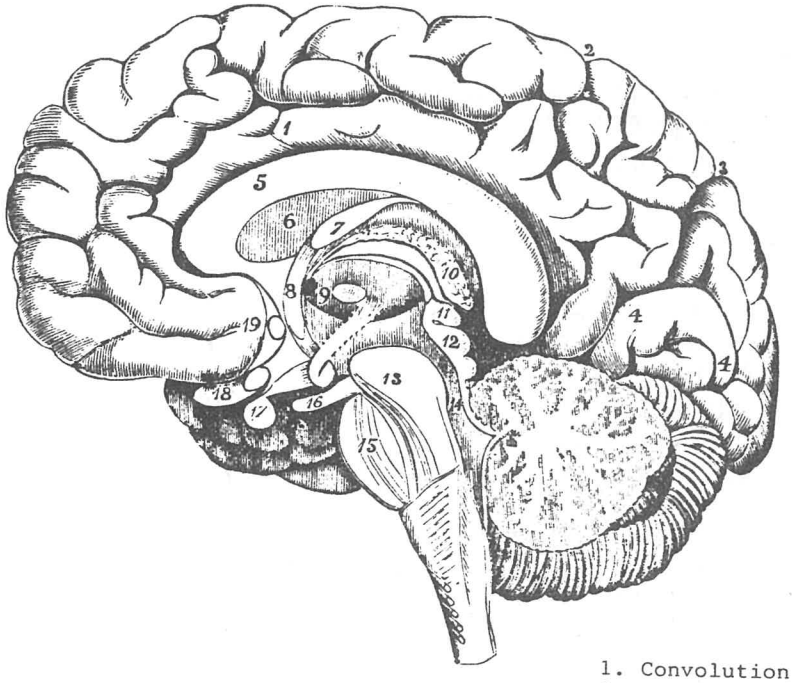
Jeremy



1. Convolution of the Corpus Callosum
2. Fissure of Rolando
3. RS232/IEEE PORT
4. Fortran Compiler
5. Corpus Callosum
6. Unix System Software
7. Bitus Defunctus
8. Arithmetic Chip (32 Bit)
9. Hardly Anything at All
10. Email Addresses
11. Error Messages
12. Expansion Slots ($9-$E)
13. 20 Meg Online RAM
14. Biggus Namus
15. Magnetic Bottle
16. Who Cares
17. Timing Chip
18. Optic Fibre
19. Anterior Commissure

Inside:

Well, where is that CROC?

What Party?

Exam *Horror*? We show you how to beat those exams.

Prizes Galore!

The Official Journal of The University of Sydney Physics Society

Volume 8 Number 1

April 1992

.... CONTENTS ....

Editorial	1
Physics Forum	2
Presidents Report	2
The Kit Kat Quotes Competition	3
A BLAST from the PAST	4
A continued BLAST from the PAST	5
How to Pass Exams ?	6
A Champion Party. Review	7
Laboratory Log Book LIFT-OUT	8
Jeremy 1992 Physicist of the Year Competitions	10
Is it the Physics Canteen OR a TOKAMAK TORTUS?	12
STOP PRESS...(Competition)	15

Editorial

Welcome all, to this the first issue of Jeremy for the new year. The editors and compilers of Jeremy wish to extend a very warm welcome to all of you out there in Physics Land. If you are new to this enchanted world and didn't want to be here anyway a special welcome is extended to you.

To those new students we can offer you no explanation for the existence of this journal, nor can we explain where the title Jeremy originated from. Much relative time has passed and all the records relating to these events were lost in the future!

Jeremy this year is running several competitions. You could win a Co-Op Book Shop voucher in the Physicist of the Year Awards, or in the Back Page STOP PRESS Competition. You and your lecturer could win the coveted Kit Kat Quotes Competition. There are also competitions to design an emblem for PHYSOC (Yes!!...A NEW CROC), and also an emblem for the Physics Dept. open day pamphlet. See inside for more details.

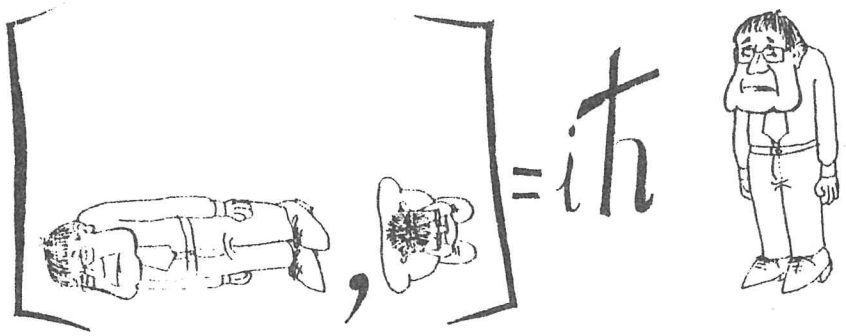
Aside from this Jeremy tries to have a serious side, the Physics Forum, written by the well known legend John Gaunt has the purpose to show us how physics can be applied to the real world. Each issue will also (hopefully) contain an article about a research project in the School of Physics.

Finally Jeremy is also supposed to keep you well informed about the up and coming events of the Physics Society, the only problem being that by the time anything is printed it is usually out of date and wrong. So check those notice boards in the lecture theatres and keep an eye out for notices that get plastered all over the place that are usually a little more reliable.

Finally Finally... Send in those DOODLES, prose, poems, songs, pictures and of course serious physics questions & articles. BECAUSE YOU might win an award and because we need something to publish next issue!

Mick (a real elect ed.)
and Fletch (an imaginary ed.) out.....

P.S. A thank-you to Elizabeth and Rosemary (from the imaginary ed.) for saving him from terror of WORD and the PHOTOCOPIER!



PHYSICS FORUM

by John Gaunt and Neil Broderick

Thank-you Neil for this enlightened; on-time contribution.
BUT that's what Theoretical Astrophysicists usually do I suppose.....

They just leave you BLANK.

PRESIDENTS REPORT

Hello everyone! Welcome back to another year of endless parties. I'd like to start the year off by thanking the editors for the promptness of this issue.
Below are the NEW Physoc committee members for 1992 who were recently elected at the Annual General Meeting:

President -	Tanya Feletto
Vice President -	Ariane Blanch
Secretary -	Tanya Hill
Treasurer -	Paddles (really: Tim Anderson)
Editors -	Alasdair Hey, Michael Pope, Rosie Jones and Geordie
Advertising -	Bryan Gaensler and Geoff Facer
Party Organiser -	Alasdair Hey
Committee Members -	David Monro, Ben Eggleton and Derrick
Physoc Mascot -	Dr. Ian Johnston

Thanks must go to our illustrious artistic directors (alias advertising exec's) for having already begun work on this years Physoc Posters. A quick reminder to everyone - STOP PULLING THEM DOWN!
There's a lot happening in Physoc this year. As well as the usual parties (dry ice cocktails is a specialty) there will be talks and (hopefully) some excursions. (Perhaps a night of stargazing and worshipping to Betelgeuse, the home of my hero Zaphod Beeblebrox the 9th!) There is also a competition for the design of a new emblem for Physoc (A New Croc.) and the Physics department open-day pamphlet. Prizes will be good!
For those students new to the Physics Department or others who for some reason have not yet joined Physoc - do it SOON! (at the next Party!)
So long and thanks for all the fish,

Tanya Feletto
Your NEW president.

The Kit Kat Quotes Competition

Once again, Jeremy will be running the Kit Kat quote competition. This is partly to amuse everyone, and partly to keep the lecturers on their toes. It is left up to you to decide how contrived some if these are, and which of the staff are just out to get their names in print (those who can't get into Ap J or MNRAS).

At this stage, prizes will be the same as '91, a box of Kit Kats to the person who submits the quote, and a book prize for the hapless lecturer.

They have already started to flow thick and fast, straight from the horses mouth, so be on the lookout and keep those auditory sensors open.

Quote of the year from last year:

Peter Robinson:
"No, quantum mechanics is not as funny as solid state physics."

And this year so far.....

Peter Robinson:

"'Mangling', by the way, is the appropriate verb for what one does with special functions."
"As a friend of mine once said, the only thing which acts like a billiard ball is a billiard ball. He did Physics III three times so he ought to know."
"If you have an atom in a position where it can jiggle then it will jiggle."

Brian McInnes:

"Some of us here are not all male."

Don Melrose:

"You have two problems, you have a nozzle, which is a nozzle, and a wind, which is a wind."

Neil Cramer:

"This should be correct because it is a classical result and it doesn't involve Planck's constant at all."

Ross McPhedran:

On advanced light sources:
NeilB: "Why is it called advanced?"
Ross: "Because if it isn't called advanced you won't get any funding."

"When my ship comes in I'll make lots of money from you."
"We use a somewhat provocative notation here."
"Once again our integrals proliferate merrily."

From foreign lands:

Prof Joe Monaghan (Monash University)
"You could see the instability staring you right in the face."

A BLAST from the PAST

While cruising through early editions of Jeremy this was stumbled upon...
... and it was ... here it is ... direct from JEREMY Volume 2. Issue 3...

Money for Nothin'

Now look at them yo-yos that's the way to do it
You teach the students for the BSc
That ain't workin' that's the way you do it
Money for nothin' and your trips for free
Now that ain't workin' that's the way you do it
Lemme tell you them guys ain't dumb
Maybe get some chalk-dust on your little finger
Maybe get some chalk dust on your thumb

We gotta cram our thermodynamics
Wave theory, quantum misery
We gotta cram for semiconductors
We got to cram for relativity

See the big professor with the bald patch and the big chin
Yeah buddy that's his own hair
The big professor got his own lab setup
That professor he's a thousandaire

We gotta cram electromagnetics
Plasma physics, astronomy
We gotta cram newtonian mechanics
We gotta cram this electricity

I shoulda learned to do that theory
I shoulda learned to do them sums
Look at that Davis he gets to appear on camera
Man, I bet that's fun!
And who's up there, what's that? Brian McInnes?
He's bangin' on the blackboard like a chimpanzee
Oh that ain't workin' that's the way to do it
Get your money for nothin' get your trips for free

We gotta cram these microwave waveguides
Instrumentation, optic theory
We gotta cram statistical mechanics
We gotta cram conserved energy

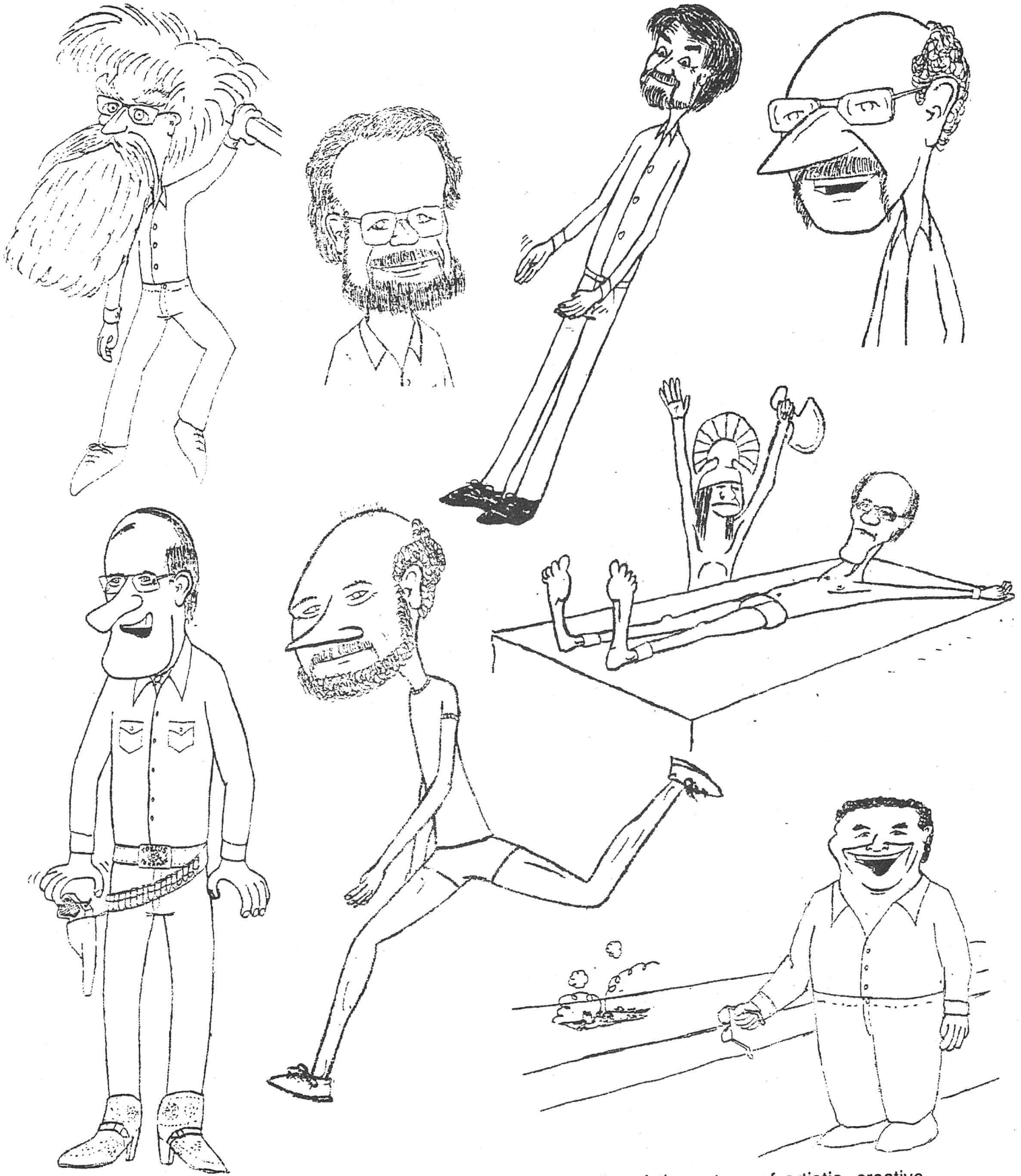
Now that ain't workin' that's the way to do it
You teach the students for the BSc
That ain't workin' that's the way to do it
Money for nothin' and your trips for free
Money for nothin' and your trips for free

..... No author ..... Yet such craftsman ship!

A BLAST from the PAST continued ...

** MEET THE STAFF **

I also found some PICTORIAL PORTRAITS of our Great EDUCATIONAL LEADERS



I am sure you lot out there can improve the depth and quality of these type of artistic, creative expressional impressionisms.... Release those inner thoughts onto paper and enter them in the Physicist of the year Competition.

HOW TO PASS EXAMINATIONS !

THESE ARE ACTUAL EXCERPTS FROM STUDENT SCIENCE EXAM PAPERS:
{Who said the educational system is below par? Read and enjoy.}

Charles Darwin was a naturalist who wrote the organ of the species.

Benjamin Franklin produced electricity by rubbing cats backwards.

To remove air from a flask, fill it with water, tip the water out, and put the cork in quick before the air can get back in.

The process of turning steam back into water again is called conversation.

A magnet is something you find crawling all over a dead cat.

To prevent conception when having intercourse, the male wears a condominium.

Parallel lines never meet, unless you bend one or both of them.

Algebraical symbols are used when you do not know what you are talking about.

The pistol of a flower is its only protection against insects.

The moon is a planet just like the Earth, only it is even deader.

Artificial insemination is when the farmer does it to the cow instead of the bull.

An example of animal breeding is the farmer who mated a bull that gave a great deal of milk with a bull with good meat.

The hookworm larvae enters the human body through the soul.

When you haven't got enough iodine in your blood you get a glacier.

It is a well-known fact that a deceased body harms the mind.

For fainting: rub the person's chest, or if a lady, rub her arm above the hand instead.

For fractures: to see if the limb is broken, wiggle it gently back and forth.

For nosebleed: put the nose much lower than the body.

For drowning: climb on top of the person and move up and down to make artificial perspiration.

To remove dust from the eye, pull the eye down over the nose.

For snakebites: bleed the wound and rape the victim in a blanket for shock.

Before giving a blood transfusion, find out if the blood is affirmative or negative.

Bar magnets have north and south poles, horseshoe magnets have east and west poles.

Time for a change?

A review of the Physics Society Party.
March 27th 1992

When somebody mentions the word 'Party' what image comes into your mind? Do you think of conversation? Do you think of food? Orange Juice or alcohol? Sausages and salad? Dancing? Singing? Liaisons best forgotten? All these things?

It is great to be able to report that the March Physoc party was all these things and more!

We gave the party a Split-Level effect. As has become traditional, the Physics Solar Roof was opened for the barbecue and open air antics. Inside we transformed the Physics Conference room to a dancefloor and indoor beer garden! It's never looked better.

Come 6.00pm we let the floodgates open and in streamed thousands of enthusiastic physicists from around the globe! Apart from a few initial hiccups (like forgetting some amplifier leads) our DJ got busy pumping out a great selection of new and old tracks. The Physics building shook on its foundations as music woke the gods and stung our senses!

The lager flowed and sausages sizzled. (Ta Neil.) Should this be happening in the Physics Building? Of course!

Those whose auditory nerves were less shockproof took flight to the Solar Roof where they were entertained by a glorious clear night sky. It was great to hear the sounds from the Physics building reverb off Manning building for once! To see the flashing lights illuminate Sydney!

It was surprising to see who got dancing and who didn't! C'mon join in! It was the smallest crowd I've ever seen dance to ZORBA! Bus-stop, and Nutbush City Limits went down like quark soup. At least Guns'N Roses caused a few casualties - including the #1 CD player whose laser went KAPOW to the vibrations.

At the end of the night all the beer and cider and punch -Boy... who put the PUNCH in the punch? Well done! - had been swilled and spilled. (I believe there were only two cans left) Everyone had fallen over about 15 times. There was a suspicious trail of water leading from the male toilets. Second year students hijacked Lecture Theatre 8. And more.

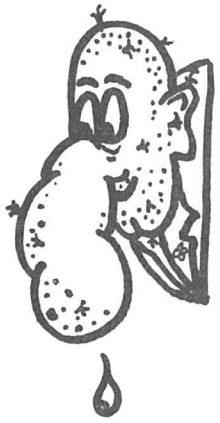
Great Night. Many more to come.

Many thanks to:

The School of Physics for the use of the building.
To all those guys who helped in the cleanup.

Alasdair Hey
Party Dog

Don't Forget... We Need a New Physoc Emblem
Fame and Riches for the best entry!



- - - - - SPECIAL - - - - -
- - - LIFT OUT SECTION - - -
LOG BOOK and REPORT WRITING

Hints on ensuring that your log book is a

LAY-DOWN MISSERE

(Including hints on REPORT writing)

These notes are provided for those students anxious to reduce the marks awarded for Experimental Physics. They are subject to revision at any time without notice, and are not guaranteed. However in the past many students have found these and similar techniques to be extremely effective.

1. Do not date your work

2. On no account form an index of your experiments, nor number the pages. You could try entering the occasional experiment upside down.

3. Always omit the experiment name and reference number.

4. Never include a diagram of the apparatus (don't even be tempted to stick in a photo copy from the lab notes).

5. Write any experimental results you obtain on old scraps of paper, leaving equivalent blank pages in your log book. If you must copy the data into your log book, don't do so for a day or two. Ideally you should lose the scraps of paper, and enter the results from memory; alternately you can work back from the answer.

6. It is unwise to even think about plotting a graph, but if you do be sure that you don't paste it into your book anywhere near the corresponding table of data. Never give a graph a title or label the axes. If you accidentally put scales on you axes, be sure never to adopt the convention for the units recommended by the Union of Pure and Applied Physics. An even better choice is to present a computer-plotted graph with no axes at all. Remember that error bars spoil the appearance of all graphs.

7. If you have included a graph, don't under any circumstances plot any "expected" or "theoretical" line to compare with your points. You should just join the points with a shaky hand drawn line. Quite a good tip is to use a really thick pencil, or smudgy ball-point, so that the plotted points are obscured.

8. If the Notes ask you a question, NEVER ANSWER IT. Failing that, couch your reply in vague, mystifying terminology and don't identify it as an answer to an explicit question.

9. Many experiments require arithmetic to be done with numerical results. Always do such calculations using your hand-held calculator *without writing down anything except the final result.* This last point is most important, indeed you should avoid any clue as to the theoretical expression you are using.

10. Where ever possible avoid quoting statistical uncertainties and physical units for numerical data; alternately make these ridiculously small and quite wrong respectively.

11. In general do not compare your result with any theory or accepted values. However it is quite acceptable to subtract your result from the true value of the known physical constant, and say how much you are "out" by. In fact it is an excellent way of finding statistical accuracy of your work, if you think about it.

12. When you make a mistake in your log book, never simply cross it out with a single line, and NEVER EVER include any note as to what was wrong, not even "oops". There are too many deletion techniques to list here, but they include white-out, removing pages, sticking in patches, total obliteration with ball-point ink, rubbing out. This last is most effective in ink-written books. However the use of pencil is strongly recommended for all log books... there is just so much scope for illegibility of *correct* material, let alone mistakes.

With the above hints, together with some creative individual ideas, no student should be disadvantaged in the quest for the null mark result. Nor should most students have much difficulty adapting these principles to REPORT writing. That said, it would be unfair not to mention in this context, the effective but very challenging technique of writing reports according to the so-called "parallel paradigm". Our experience is that many students make worthy attempts, but few achieve perfection. This paradigm applies where experiments have multiple parts. The greater the number of parts, the greater the benefit of parallel writing. It goes roughly like this: First, write the aims of each part, one after the other. Then draw and/or describe the apparatus for each part, one after the other (FEP,OATO). Continue with the theory FEP,OATO, then the technique FEP,OATO, the tables of results FEP,OATO and so on to complete "m" sections for an "n"-part experiment, making a (m x n)-order parallel report. *Be warned:* this style of report writing is not easy.. nearly as hard to write as it is to read.

If you have any comments, queries or suggestions for improving this document, please present them (signed) in writing to you demonstrator.

Brought to you by
Dr. MIL inc.
1992

ROBOTMAN

:: PHYSICISTs of the YEAR ::
:: 1992 COMPETITIONS ::

The first step to winning the Nobel Prize in Physics is to enter one of the JEREMY competitions.

There are five divisions this Semester:

1. **All round Physicist 1992.**
2. **Applied Physicist 1992.**
3. **Theoretical Physicist 1992.**

For those of you who do not think they can manage these divisions then there is a good chance that you can win division 4 or 5.

4. **Physicists 1992 majoring in artistic CREATIVENESS & IMPRESSIONISM.**
5. **Physicists 1992 majoring in CREATIVE WRITING & EXPRESSIONALISM.**

Here is how you enter:
Divisions 1,2 and 3 require the budding Nobel Prizist to solve a problem, and divisions 4 and 5 require the true spirit of the Physicist to be released.

Division 1:: PHYSICIST of the YEAR 1992

This problem relates to the humble football, or for you mathematitians an ellipsoid of revolution. When you rest the football on the ground it seeks a position with its centre of gravity as close to the ground as possible. See Figure A. Now give it a good spin around axis A-A (its short axis). WAIT... ZAPPO it comes up on its end . See Figure B.

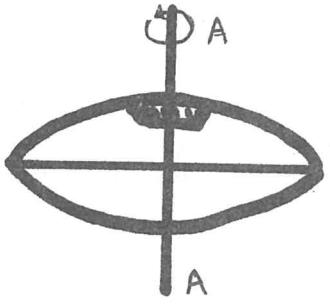


Figure A

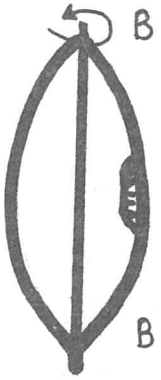


Figure B

And now it spins about axis B-B (its long axis). Lots of physics here! What has happened? The centre of mass has been raised, the moment of inertia of the football around A-A is less than around B-B and lots of other funny things happen during the transition. You will have to do some experiments. The best solution will win the title PHYSICIST of the YEAR 1992, so to become famous send your submission to JEREMY.

Division 2 :: APPLIED PHYSICIST 1992

Try this one quiet evening. Stand on the footbridge that links Carslaw to Wentworth and jump about. WAIT... Yes the bridge flexes! You can feel the wiggle under you feet as a wave of energy does its thing. The question is one of simple harmonic oscillations at an extreme level. Find the resonant frequency of the bridge structure, then formulate a method of bringing the bridge down as a pile of rubble onto City Road.

For example you could send a marching band with a periodic foot movement correlating to the overtonal bend of the bridge. OR ... you could strategically position willing psychology students on the bridge and get them to jump up and down (or just up and off) in a choreographically weird fashion.

A full demonstration of your theory would automatically render the title APPLIED PHYSICIST 1992 to you. Otherwise just send your thoughts to JEREMY and we will test them out.

Division 3 :: THEORETICAL PHYSICIST 1992

You lot just think about a solution, submit it, and we will find the appropriate problem. Well what are you waiting for? Get to it Neil!

Division 4 :: PHYSICISTs 1992 majoring in ARTISTIC CREATIVENESS &IMPRESSIONISM

Out there in the back rows of Lecture theatre 8 (and the like) lurk the doodlers of physics. YES those doodles, sketches etc.. of lecturers and fellow students, that depict them as they really are in the recesses of depraved minds could easily win you this coveted title. Send your doodles or master works to us and we will publish them for all to see.

Division 5 :: PHYSICISTs 1992 majoring in CREATIVE WRITING & EXPRESSIONISM

Okay those of you into prose and poems, songs and serious stuff. Send them to us and you will become a legend. NOTE: **All articles submitted to Jeremy will be eligible to win this division.**

If you have any questions about the questions then question the answer and submit that. Send all your submissions to

JEREMY

P.O. BOX. Just opposite Lecture Theatre 8 in the pigeon hole marked JEREMY out the front of the Physics Schools Office.

Remember put your Name and year on your submissions so that we may personally abuse you. The major prizes for divisions 1,2 & 3 will consist of a $25 Co-Op voucher. The major prizes for divisions 4 & 5 will consist of a $20 Co-Op voucher and all the winners will be announced in the next issue of Jeremy. Consolation prizes of FREE Entry to Physics Society BBQ's will also be given to worthy entries submitted through the course of the competition (Especially in Divisions 4 & 5). Entries will close week 10 of First semester.

RECENT NOBEL PRIZES IN THE SCHOOL OF PHYSICS!

The following members of staff have recently been awarded Nobel Prizes.

IS IT THE PHYSICS CANTEEN, A TOKAMAK TORTUS (*mutant ninja or otherwise*) OR IS IT A ZOO CATERING FOR EXOTIC STATES OF MATTER?

WHAT LURKS BEHIND THE CANTEEN SHUTTER at the west end of the Physics Building ground floor? Well to those who have wandered countless times past the usually closed shutters (and to those of you who will) you can read on if you like, but this story especially caters for those who have queued there for hours unsuccessful and hungry.

The Plasma Physics Department claims that it is a laboratory for the study of basic plasma physics and is designed for the training of young scientists in experimental physics. Sounds like a line out of the Annual Report of the Science Foundation for Physics to me, but I won't let that get in the way of a good story!

Once upon a time there was plasma, then a lot of it went cold.... What is plasma you might ask?

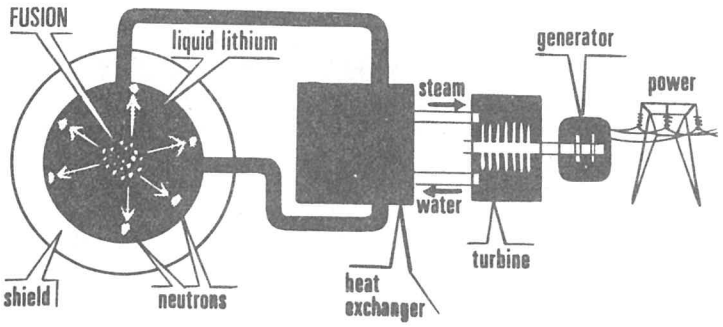
Heating turns a solid->liquid->gas->plasma

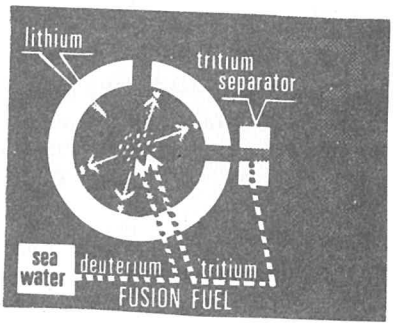
At temperatures above 6000K gas atoms are stripped of their electrons and form a fourth state of matter known as plasma. Common examples of plasmas include welding arcs, fluorescent tubes, the ionosphere, lightning, the sun and stars. So there is plenty of it about and at temperatures above 20 million K hydrogen can fuse to form helium and release thermonuclear energy, either timidly or aggressively (eg H bomb) depending on how much fuel you want to burn.

Let us examine briefly the 20 million plus scenario in relation to the production of useful power because FIZICISTS seem to get excited about it! *Remember the nuts that deal with this stuff are FUSION FIZICISTS as opposed to FIZZION FIZICISTS. (JUST BEWARE - excited Fizicists of either strain are not always a pretty sight and should be kept away from young children at all times!)*

Recipe:
Take one evacuated vessel, confine a few micrograms of deuterium and tritium, shove in giga-lots of power. WAIT.. Collect the stray neutrons in a lithium oven bag that acts as a heat exchanger and doubles as a source of tritium to feed back into the reactor, thanks to the reaction 'Lithium + neutron -> Helium + Tritium'

Presto!... Pipe the steam from the Lithium oven bag heat exchanger to a steam turbine and make electricity. Stand near the mail box and await your Nobel Prize and pretty good job prospects.





(diagram of power station)

A reactor based on deuterium-tritium fusion would release 80% of its energy as very energetic neutrons. These neutrons could then heat a jacket of liquid lithium and this heat energy could be used to produce steam to drive a conventional turbine-generator. The neutrons would also cause fission in some of the lithium nuclei, producing tritium fuel for the fusion reaction with the deuterium being obtained from sea water (You have about 1mg of deuterium in your body, so you might be useful one day as cheap fuel).

Well where did this quest for the same energy that drives the sun enter the realm of the lab begin?

.PINCH DEVICES.

The first devices used to contain plasmas were open ended and confined the plasma by a magnetic pinch effect. These devices employ ohmic and shock heating methods. The major problem with pinch devices is that they suffer from the confining magnetic field lines intersecting the vacuum chamber. This allows charged plasma to come into contact with the walls of the vessel resulting in rapid cooling of the plasma.

.MAGNETIC MIRRORS.

Intricately tangled piles of wire that manage to create a magnetic field, that traps particles by bouncing them back into the region of confinement away from the walls, are known as magnetic mirrors. Unfortunately a small percentage of the particles still escape, and due to the high velocities and mobility most of the particles eventually escape out the ends before fusing.

Other problems arise, when the plasma is around 1,000,000K it is a poor conductor but as the temperature rises to 10 million degrees it has a conductivity similar to copper. Thus very big currents are required to maintain hot plasmas. Experiments using ohmic heating have achieved temperatures required for the fusion reaction to occur. But the life-time of the plasma has been far to short to yield enough energy to make the reaction practical.

.STELLERATORS and TOKAMAKS.

The next generation of confinement devices used a toroidal geometry. The two major devices developed were the stellerator and the tokamak. Both employ a toroidal magnetic field to confine the plasma. The magnetic field is provided by a series of helical electromagnets wrapped around the evacuated vessel in various configurations.

The tokamak was developed in Russia during the 1960's (TOKAMAK is an acronym of the Russian words for toroidal magnetic chamber). The experimental results using the Tokamak were so much better than other devices that by 1970 all the major countries involved in fusion research had their own tokamak research facilities.

There are currently three very large tokamaks in the world, each costing in the order of $300 million. The JET in England, TFTR in the USA and the JT60 in Japan. There is also a small one called TORTUS hiding behind the brown canteen shutter at the west end of the Physics Building.

.The TORTUS.

The size and cost of the new generation TOKAMAK was in the order of billions of dollars. Machines of these proportions were being built around the world but experimental time for basic plasma physics would be limited and costly. It was decided that a smaller device costing 0.5 million dollars would be suitable and satisfy three important requirements.

A small Tokamak generating plasmas a temperatures of 3 million K would be ideally suited to basic plasma physics research.

.At temperatures of a few million degrees it is possible to develop and test various diagnostic equipment that is useful in larger tokamaks.

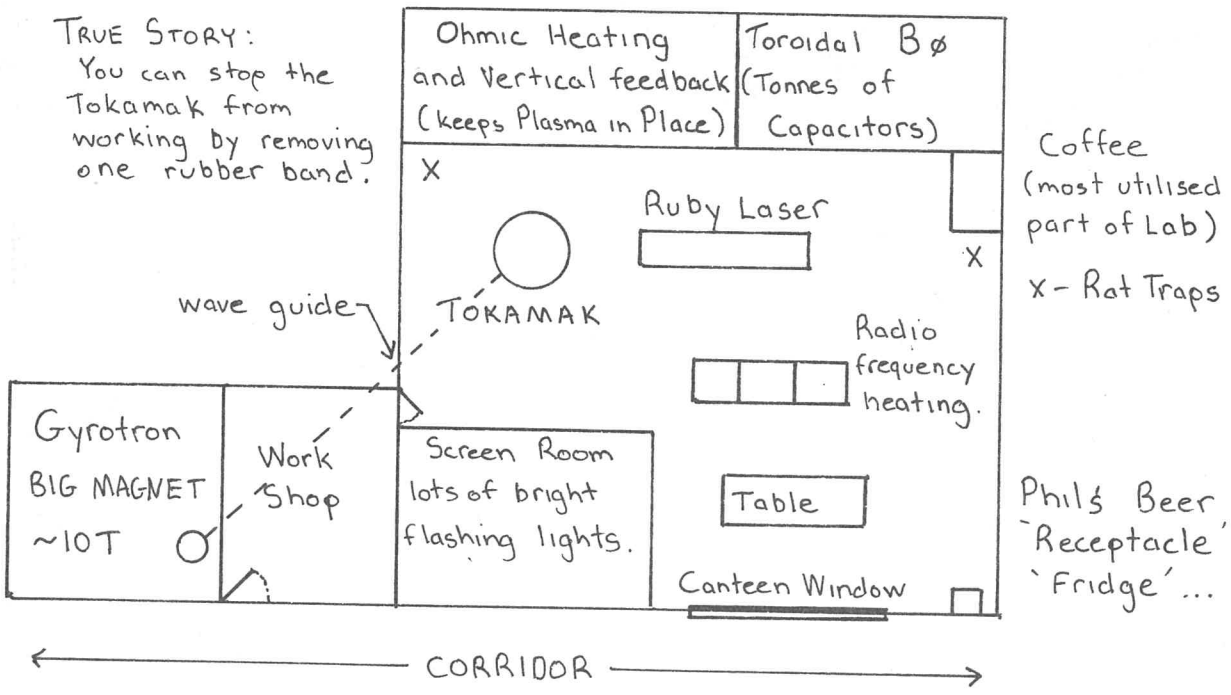
. Physicists and engineers could be trained on the device.

There was a heightening awareness of alternate cleaner fuel sources and the need for Australia to play a part in the development and research of alternate energy sources. In 1977 the Wills Plasma Physics Department took the step and decided to build a tokamak to be known as TORTUS (TORoid of The Uni of Sydney).

The TORTUS was commissioned in 1981, the high quality of the design and construction won the three designers Dr R.C.Cross, Dr B.W.James and A.Prof J.A.Lehane an ANZASS Esso Energy Award in 1983. The award citation concluded by observing that not only was their work contributing to the international research programmes but it may contribute materially to Australia's range of energy options in the 21st century.

The Ph.D students that have studied in the field of plasma physics are much in demand by overseas institutions. Many have become post doctoral fellows and several hold important positions at the JET and TFTR Tokamaks.

Enough of this. What else is hidden behind the shutters?

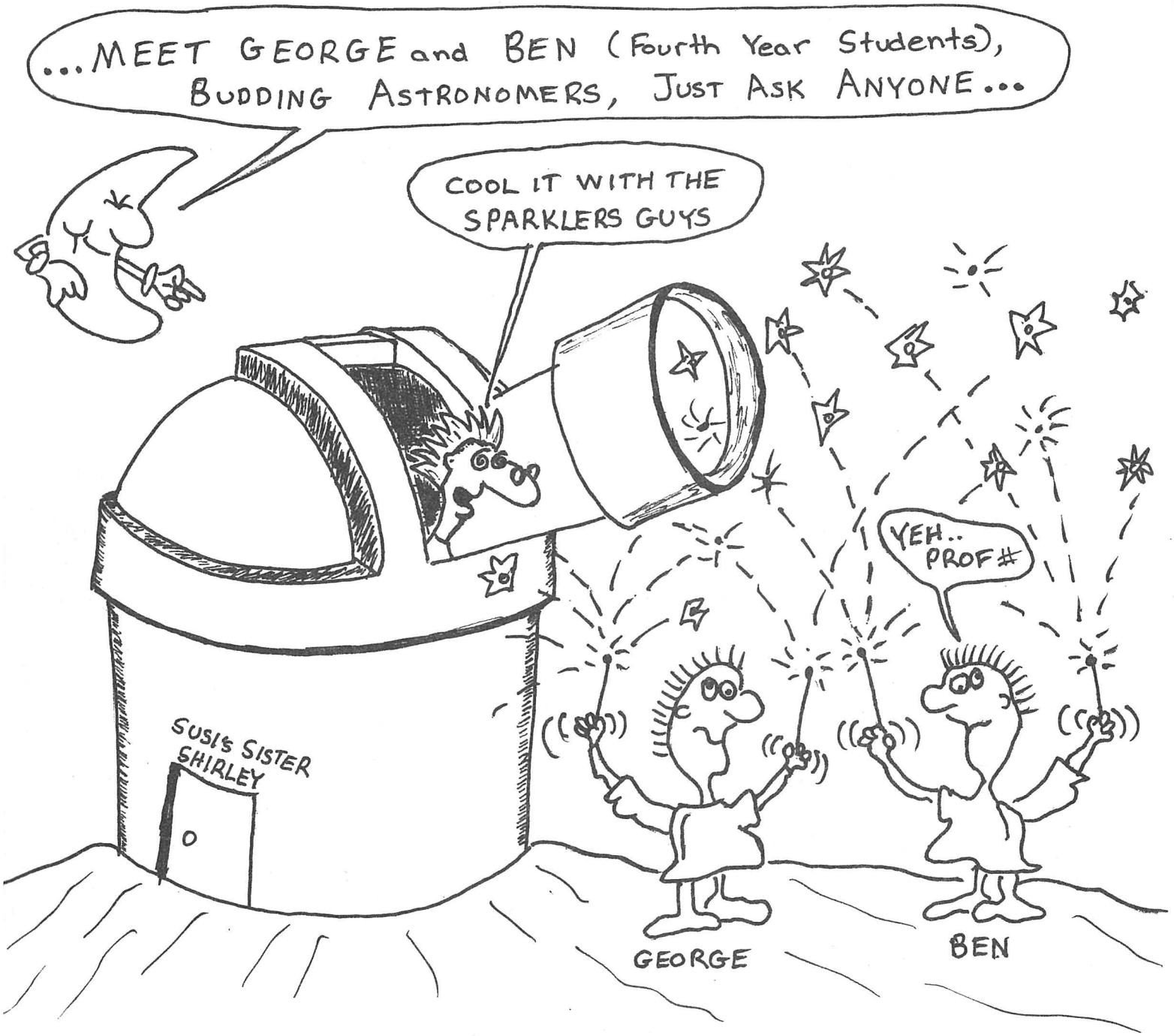


(map of lab)

INTERESTED? What about a tour behind closed shutters? Actually come face to face with TORTUS itself and see two rooms filled with more capacitors than physics formulae. Well, gather a few friends together and give A/Prof R.C.Cross a ring on 692-2545 and arrange an inconvenient time (like during one of your physics labs).

Compiled by the IMAGINARY Ed.

:: STOP :: PRESS ::



.....GEORGE and BEN Goto NARRABRI.....

STOP PRESS Competition:
The back page is dedicated to something stupid., like 'George and Ben'. A $30 Co-Op voucher will be awarded to the submission that is published in the next STOP PRESS. All entries for this section will be eligible for the Physicist of the Year Competition division 4 or 5. So put on those thinking caps and get those submissions in ASAP.