

The Official Journal of The Sydney University Physics Society

Volume 5 Number 1

March 1989

Editorial

No, don't be afraid. What you now have in your hands is not in any way dangerous to your academic record. It may even be helpful. Within these pages it may be possible to find some of the well kept secrets of how to do well at physics without really trying. So, adventurous reader, read on and enjoy!

Oh, by the way, this is the first issue of *Jeremy* for 1989. *Jeremy* is the official journal of The Sydney University Physics Society. Please don't ask us why it's called *Jeremy*, because more than likely we will jump down your throat, grab you by the tonsils and force you to recite Newton's laws of motion backwards in Japanese, while at the same time calmly explaining that it's an extraordinarily long and involved story, the origins of which are lost way back in the mists of time (even before we

were first years), which we ourselves don't fully understand.

Now if you think that "The Official Journal of The Sydney University Physics Society" is bound to be a boring blather of unintelligible gabble and incomprehensible mathematics, then are you ever going to be surprised! What this publication is actually all about is providing something that is not often offered to students whilst doing formal coursework, i.e. fun! This is provided for in several features, especially the extremely popular annual Quotes Competition, now in its fourth year. There will from time to time be some more serious articles, but guaranteed to be both readable and of interest

to anyone with as much as a passing interest in physics, or even science in general.

BUT (here comes the crunch!), we can't keep doing all the work. This is your magazine and so we expect you (including staff) to contribute. Apart from sending us quotes and competition entries, please submit material. Anything is welcome: humourous articles, serious articles, puzzles, cartoons, reviews, comments, suggestions, poems, stories, anything! You don't even have to worry about typing it up, unlike submissions to other publications. Anonymous is fine too, but we will occasionally reward worthy contributions, so including your name and year is a good idea. All contributions can be placed in the Physics Society mailbox, situated in the main office foyer, near the base of the stairs opposite LT8. The box is hidden behind the door, so be brave and walk straight in. Any budding writers out there with ambitions to be published, go for it!

Phew! Now that all that's out of the way, we would like to welcome all first year students to the Uni and the Physics faculty and say "Hi!" to everyone else who has come back for another year of (um...) enjoyable study. Until next edition then, do your best to accomplish those mutually exclusive

goals: Study Hard and Have Fun!

The Editors: Kim Lester (Physics IV, High Energy)
David Mar (Physics IV, Astrophysics)

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Fourth Annual Quote Competition

For all those of you in first year who will be reading Jeremy for the first time, and for those others who have been asleep/dead these past years; this is our fourth annual competition. The idea is to listen very carefully to what the lecturer says¹, not what he means.

We accept Foreign Quotes (quotes from other faculties), but they are not eligible for our great end of year prize. The annual winner is chosen by reasonably democratic methods at the end of year physics party. Prizes will be awarded to the quote perpetrator and to the person submitting it.

Lecturers caught cheating, by having any unauthorised notes to aid them in improving their quote rate, will be the subject of academic misconduct proceedings (bribes not withstanding), which may lead to disqualification and/or legal proceedings.

Repeat quotes will NOT be accepted (Ian Johnston please take note); we are compiling a definitive list of all recorded quotes so watch out!

Submissions should be made to the Physics Society Mailbox which is located behind the door in the Head Office (opposite LT8).

Here are some quotes to start us off:

- Don Millar "You find the error and correct it in your notes."
- Dick Collins "To do Honours Physics you don't have to be an Einstein or even an Ian Johnston you can be a perfectly normal person."
- Graham Derrick "...grrr ...mumble ...rhubarb ...shh ...grumble ... mumble ...Schrödinger ...mumble ...overlap ...mumble" (submitted by Darren Kelly)
- Ross McPhedran "There are certainly many nodes of communication quantum up the back."
- Bob Hewitt "It's quite robust and useful, even for theoreticians who won't bugger it up at the end of the first hour."

 (To what was he referring?? Ed.)
- Don Melrose "I don't know what I can do, but I can start fiddling."
- Bernard Pailthorpe "Like all things in thermodynamics, it's absolutely useless."

FORSIGN QUOTES

- Dr. David Rees (Applied Maths) "For simplicity consider a smooth, spherical, weightless elephant."
- Dr. Buchan (Applied Maths) "You don't know how to do this integral? well I don't either."

¹This is not to say that we advocate undue mental exertion.

UNCLE DICK'S CONUNDRUM CORNER

When we (the Eds) took over the bulky file labelled "Jeremy contributions", we found the following strange letter from Professor Dick Collins of Applied Physics.

To the Editor, Jeremy.

Dear Mr/Miss Editor,

Every time an issue of Jeremy comes out I am smitten with pangs of guilt that I have not yet made a contribution to your magazine. Admittedly, it is a journal of the Sydney University Physics Society which I think is a euphemism for an exam swapping club to help students get through with a minimal understanding of physics. As such, presumably staff members don't belong. However, we are always delighted when an issue of Jeremy comes out. Just look in the tea room and observe the animation, excitement and good humour. It's the only time that these things happen in the School of Physics so you must be doing something right.

We also read with glee the distorted quotes that we and our colleagues are supposed to have generated. It seems that academics could well contribute to a regular column in Jeremy which lists some of the more choice student writings in response to examination questions. Perhaps I should suggest this to a School Board meeting.

By way of giving you something to go on with, I am including with this letter a few puzzles and conundrums. There is no prize for getting them right, or penalty for getting them wrong. It will be interesting however, to see whether any student, or staff member for that matter, can come up with a halfway complete and correct set of answers. I'm not sure that I have one!

Yours physically,

R.E. Collins

Professor of Absurd Physics

Well, our good old Uncle Dick is to be heartily congratulated for this rather brave and radical move. He will of course be nailed to a wall in the tea room so that all of the rest of the staff can see what a great person he's been.

We present in this issue the set of problems that are really worrying Professor Collins. His feeble attempt at a cover-up has been seen straight through and we know that he is currently preparing an original paper on these areas of research. If you submit an answer to any of the problems, don't be surprised if you see Professor Collins accepting a Nobel Prize in the future for his wonderful work.

While Professor Collins stopped short of offering a prize for any answers, we know that none of you will even lift a finger to think about these things unless we say that there will be prizes for the best answers. As of yet, we have not determined what the prizes will be, but we would like to point out that they will not necessarily be given only to the most correct answers. Anything submitted which is sufficiently wacky or funny to be used in a later issue of Jeremy may well get something too. Of course correct answers are really what we are after.

The final date for prize consideration submissions is Friday, 12th May. The solutions should be placed in the Physics Society mailbox, which is located behind the door of the School of Physics main office (i.e. in the office foyer), at the base of the stairs outside LT8. Ask someone if you can't find it.

Finally, we would like to make an open call to all students and staff to submit any similar problems that have been bothering them to us using the same mailbox. Who knows, maybe the next great contribution to Physics will come out of all of this puzzling! Then again...

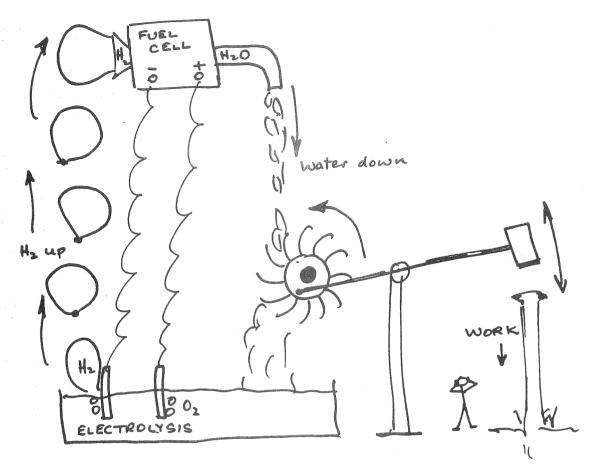


FIG 1. PERPETUAL MOTION MACHINE

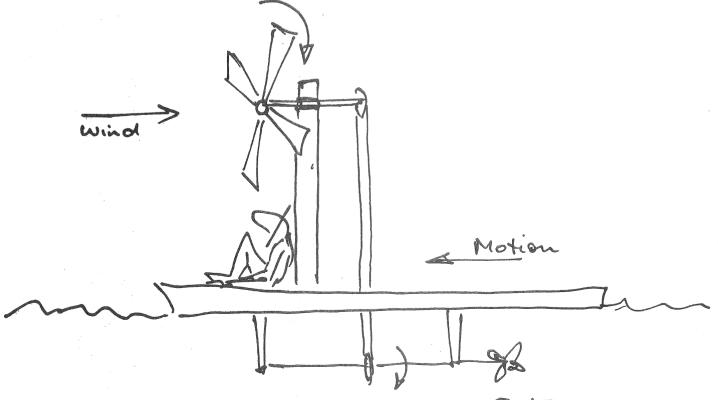


FIG2. SAILING INTO THE WIND BOAT

UNCLE DICK'S CONUNDRUM CORNER

PUZZLE #1: Solution to Ye Olde Energy Crisis

Figure 1 shows how to get energy from nothing. An electrolysis cell near sea level produces hydrogen and oxygen from water. The hydrogen is placed directly into balloons which are then allowed to float up to a great height. Once there the hydrogen recombines with oxygen in a fuel cell to produce water and electricity. The electricity is used to power the electrolysis cell. The water then falls from the great height driving the turbine blade which does useful external work. Neither the electrolysis cell nor the fuel cell are able to operate at 100% efficiency. Any deficit in the electricity energy balance is therefore made up by feeding a small amount of power back from the water driven turbine. By definition, this can be small since the height can be made as large as we please.

This system was actually proposed seriously by a well-known physicist at an Australian Institute of Physics Congress a few years ago. Fortunately, he was not a graduate of this School.

Question: Do we have to junk the laws of thermodynamics or was our well-known physicist mistaken? Explain.

Addendum: This perpetual motion machine can actually be made even more perpetual by having the hydrogen balloons lift little buckets of water as they rise up. This provides even more water to drive the turbine on the way down.

PUZZLE #2: Sailing Into The Wind

The diagram in Figure 2 shows a proposal by an engineer for a sailing boat which will sail directly into the wind. The wind drives a large set of blades which are connected by any gearing means desired to a propeller in the water below. The engineer postulates that the net forward thrust on the propeller can be greater than the net backward thrust on the windmill blades above the water and that the boat will therefore move directly forward into the wind.

Ouestion: Answer either Part A or Part B below.

A: Prove that this design can sail directly into the wind B: Prove that this design cannot sail directly into the wind

PUZZLE #3: The Ghetto Blaster

Two identical loud speakers are set up facing each other and excited externally with electrical signals of the same phase. This results in a standing wave being set up between the two speakers. Each wave will be reflected by the other speaker and, depending on the separation of the speakers, this reflection will either enhance or reduce the amplitude of the standing wave.

Question: How far apart should the speakers be in order to get a standing wave of maximum

amplitude?

Under such conditions, is the pressure midway between the speakers a maximum or a

minimum?

How do these answers change if only one speaker is excited? How do they change if the speakers are excited in anti-phase?

PUZZLE #4: The Apocryphal Foundry

An old foundry man once told me that solid metals always float on liquid metals. This is not too surprising since solid water floats on liquid water. However the reference books say that, unlike water, the density of solid metals is, in general, greater than that of liquid metals.

Question: How come solid metals float on liquid metals if they are more dense?

The First Ever Jeremy Survey: Results

For those of you who were around when the last issue of Jeremy was published late last year, you may remember that inside the cover was a loose sheet with something like "The First Ever Jeremy Survey" written across the top of it. Well, surprise, surprise, it was not actually an extra piece of scrap upon which to do your rough thermodynamic equation reductions on, nor a set of comprehensive cheat notes for all of the upcoming physics exams (although we are working hard on something like that for this year). It was, in fact, the first ever Jeremy survey.

In the intervening time until preparation of this issue was begun, a grand total of 28 survey forms were filled out and delivered back to Physoc. We consider that pretty good, out of a total readership of approximately 1000. After all, 2.8% is much greater than \hbar and, as Ian

Johnston will tell you, that makes it virtually infinity.

Without further ado, we present the results by first giving the original questions, followed by the available multiple choice answers with a count of the responses by number and by percentage of all forms returned.

Which physics lectures do you attend? 1.

Life Sciences Physics I Physics II	1 (3.6%) 6 (21.4%) 10 (36.7%)	A rather neat Poisson distribution
Physics III Physics IV Postgraduate	5 (17.8%) 3 (10.7%) 2 (7.1%)	here.
Staff I don't do physics	1 (3.6%) 1 (3.6%) this op	Thank you, Ian Johnston! One of the second years chose otion. I wonder if he passed?

Overall, how would you rate this issue of Jeremy? 2.

First Class Economy At least it's free	18 (64.3%) 5 (17.8%) 3 (10.7%)	Really now! Watch it we know who you are.
Terrible	2 (7.1%)	Watch it, we know who you are.

Most of Jeremy is (check one or more)... 3.

anomoly.

Just right Too frivolous	13 (46.4%) 2 (7.1%)	
Too serious	2 (7.1%)	
Innocuous	4 (14.3%)	
Entertaining	18 (64.3%)	-
Offensive	3 (10.7%)	We apologise wholeheartedly.

Which features of this issue did you like or dislike? 4.

Editorial	Like 12 (42.8%)	Dislike U (U%)
	Like 11 (39.3%)	Dislike 2 (7.1%)
News		Dislike 1 (3.6%)
Light-hearted essays	Like 23 (82.1%)	
Serious essays	Like 7 (25%)	Dislike 4 (14.3%)
		Dislike 0 (0%)
Short anecdotes	Like 20 (71.4%)	
Cartoons	Like 15 (53.6%)	Dislike 3 (10.7%)
Quotes competition	Like 25 (89.3%)	Dislike 0 (0%)
Uniones connocuuon	LINU 25 (0).5 (0)	

Two people commented that there were no serious essays in the issue, which shows that maybe we should tell people when an article is for real and not just a space-time

12 (42.8%) Yes 17 (60.7%) No 1 (3.6%) Maybe Do you think we should make an effort to distribute Jeremy among Life Science students? 9 (32.1%) Yes 14 (50%) No 1 (3.6%) Dunno Do you think there should be more reader participation in Jeremy? 7. 24 (85.7%) Yes 2 (7.1%) No Physics Society events are... 8. 7 (25%) Well advertised 14 (50%) Not well advertised I didn't know there were any 6 (21.4%) Would you be prepared to pay more (say \$20) for a full colour Physics Society t-shirt? 9. 8 (28.6%) Yes 16 (57.1%) No 1 (3.6%) Maybe How would you rate Physics Society parties (check one or more)? 10. 2(7.1%)Cheap 0 (0%) Expensive 5 (21.4%) Excellent 4 (14.3%) They pass the time 2 (7.1%) Pathetic Hello Kevin! 1 (3.6%) Need more food 19 (67.8%) I've never been to one Would you be prepared to pay a little more for more well provisioned parties? 11. 16 (57.1%) Yes 6 (21.4%) No Where do you sit in a lecture? 12. Conscientious, aren't we? In direct view of the board 19 (67.8%) 3 (10.7%) At the back 2 (7.1%) Near the window 1 (3.6%) At Manning Bar One person said "I wish!" 4 (14.3%) In the lap of a good friend Ian Johnston added this one. 1 (3.6%) I stand In the lecture, who do you prefer conversation from? 13. Again with conscientiousness! 15 (53.6%) The lecturer 9 (32.1%) Your neighbour The person three rows in front (who is cute)

Do you think Jeremy should have more serious bits in it?

5.

8 (28.6%)

Including Ian Johnston!

If there is graffiti on the desk do you... 14.

Better watch your job, Ian. 21 (75%) Read it with appreciation

7 (25%) Add to it

Disapprove and write to Honi Soit about the evils of graffiti

1 (3.6%)

Go to the second-year lab, get a hacksaw, saw out the piece you like, take it

2 (7.1%) home and mount it 1 (3.6%) Ignore it 1 (3.6%) I can't read

If you could organise your own timetable would you... 15.

11 (39.3%) Have lectures/pracs in the morning 16 (57.1%) Have Mondays and Fridays off

2 (7.1%) Space it out

Last warning, Ian. 6 (21.4%) Not have one

If you happened to get a questionaire in Jeremy would you... 16.

8 (28.6%) Seven people actually did. Turn it into a paper plane

17 (60.7%) Where did the rest come from? Fill it out

Use it to test out spontaneous combustion in your chemistry lab

One of these was actually singed. 2 (7.1%)

Wrap your fish and chips in it 3 (10.7%)

Somebody added "turn it into paper dolls" and did so, with very pretty results.

There was also a space for making any other comments, which drew only a few responses. One person gave a very flattering "Jeremy is funny", which of course told us what we already knew. There were some useful comments, such as someone suggesting that the postgraduates should contribute more to the magazine. This is exactly what we intend on getting them to do this year. Two people asked for the lunchtime lectures (common in previous years) to be brought back. This has already resulted in the "Physics is Fun" lecture by Professor Dick Collins being repeated again this year. We also have plans up our sleeves for many other fun and informative type lectures to be given by staff members as well as visitors later in the year. Keep an eye out for the notices!

The most commented on item was the Physics Society parties. Three people said that they should be better advertised and made more accessable to students in first year. Thought was given to this at the Physoc AGM and a plan drawn up for a special welcome to first years party, to be held some time after Easter. Again, keep your eyes peeled for the announcements. We will be making them a bit easier to find than in previous years. In particular, the Physoc noticeboard in LT8 will keep everyone informed of up and coming events. Just make sure you

look at it now and then.

Here endeth the survey results.

J

Really serious bit:

The Editors wish to express thanks to Professor Dick Collins, for allowing us to use his department's computers and printers, and to his secretary, Kathryn Collins, for being friendly, helpful, patient and, most of all, just plain putting up with us. J

Physics Society Executive

A few weeks ago the Physics Society held its Annual General Meeting. Since almost nobody turned up, don't blame us if you don't like the choices. By a unanimous vote, or apathy, the following people now form the executive:

PRESIDENT Richard Rannard (III)

VICE PRESIDENT Kim Lester (IV)

TREASURER Julian Dryden (III)

SECRETARY Peter Knight (III)

TALKS SECRETARY Pal Fekete (Postgrad)

LIASON OFFICER Ann Burgess (IV)

JEREMY EDITORS David Mar, Kim Lester (IV)

LIASON 1st year Tom McDermott

2nd year ? - No-one turned up!!

3rd year Richard Rannard

4th year David Mar, Kim Lester

staff David Mar, Kim Lester

MASCOT Bodie

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Jeremy T-Shirts For Sale

We have a short supply of high quality Jermemy T-shirts, featuring the lovable Jeremy himself. What would you expect to pay for this? Well you get printing on both sides (not inside and outside), in at least one colour. And ..., if you order now we'll give you, absolutely free, a signed pedigree document to prove that you have the genuine article.

This, once in a lifetime offer, can be yours for only \$10.00, purchased from room 362 in the Physics Building (near LT5).

First-year Fever

Kim Lester

During the first week of term our two intrepid reporters (us actually), heavily disguised themselves and infiltrated a 1st year physics lecture. We had practised our vacant expressions, confused looks and general first year comments such as "Am I supposed to be in here now?", or "Oh I thought this was Advanced Macro-economical Statistics I – a personal view by Mr. Keating." Using such comments and expressions we blended perfectly

into the background.

The lecture was destined to start at 1600 AEST. We thus has to sacrifice our afternoon Tea-and-Bikkies. [Tea-and-Bikkies is a singularly important event horizon in a physicists day. If it is inadvertently missed, then the physicist's state-of-mind continuum is severly distorted.] Walking past LT8 at 1542 we were shocked to discover about 40 students already seated. We just couldn't believe our eyes. There was no lecturer in sight. But if you are finding it hard to believe, there is more to come. They were all SILENT, studying what appeared to be a pink covered set of lecture notes. Examining a specimen we found it to be completely blank — was this a subtle comment on the course content?? Seated at the front centre of the room we could keep a close eye on Max Brennan (the lecturer and our esteemed head of department), who has been teaching for so long that they're thinking of naming an epoch after him. When asked to comment on this, his only recollection of earlier days was some smart-alec student who kept rabbling on about the dangers of apple trees. "Isaac someone or other as I recall. Not a very bright student I thought ... wonder what became of him."

The lecture topic was Forces. What is a force? How many of us remember that ubiquitous question? How many of us can answer it properly?? Answers poured in from the enthralled audience at an almost totally non-existant rate, completely underwhelming the poor lecturer. "Come on somebody must know..." The inevitable "Push/Pull" was forthcoming as well as someone who mentioned stress (either an engineer or a psychologist – and psychologists can't do physics). M.B. decided to cut his losses and tell them all about forces.

A demonstration livened up the proceedings but failed to impress the audience with its physical significance. Part a) consisted of a volunteered student walking up and down the front of the lecture theatre at a zeroth order approximation to a constant velocity whilst holding a board duster. This heroic feat, which would have had a song written about it, had it occured during the Middle Earth era, produced only a wolf whistle from some excited student up the back. (The volunteered student – male – was wearing a pair of shorts, this is the only reason that the editors can think of for such an outburst.) The best demonstration, from our point of view, was still to come. Its aim was to show that acceleration produced a non-Newtonian frame of reference. One volunteer, female, stood holding a flat

piece of metal with a small metal object resting on it. Another observer watched the antics from the lecture room frame of reference. As the girl span round, the sheet shot out from under the object which was supposed to fall straight down. In turning she added a slight tilt to the plate causing the object to fly off into someone's bag. Having retrieved the projectile, the experiment was tried again – with the same effect. The observer was then asked which way the projectile went.

"Over there"

"Don't you mean straight down??"

"No, it went over there!"

"But, it was supposed to go straight down!", urged a losing M.B.

With the impending threat of a board pointer within the danger zone, the student reluctantly agreed that the object had indeed fallen straight down. Having helped the student sort out his quite obvious confusion, probably due to some visual defect, M.B. placidly continued as if nothing unusual had happened. (The fact that nothing unusual had happened may explain this. Physics demonstrations, in fact any demonstrations, are notorious for going wrong; most of us accept this and believe what we are told to see, not what we actually see.)

"There are two types of forces:- contact and non-contact." ... A hand goes up.

"Yes ??"

"Please Sir, begging you pardon Sir, what about elasticity?" (The student didn't actually say this, but it sounds better -Ed.) "Ah, yes well...", M.B. thinks fast - if cornered confuse 'em! "... macroscopically it's a contact force, but at the quantum mechanical level it is a non-contact force... O.K."

By now he was probably wishing he hadn't agreed to teach first year. Not even Newton's laws were working correctly. Unfortunately he never stood a chance of succeeding, if you've been attentive then you'll know that Newton's laws only work in an inertial (i.e. non-accelerating) frame of reference. But — this was the Physics I Accelerated course. Simple!?



TEACHING METHODS IN THEORETICAL PHYSICS

The Hitch Hikers Guide to The Physics Building

A Tragedy in Four Acts

by David Mar and Kim Lester.

Act One

The silence exploded around them. They were bathed in a lurid display of colour and the sound of rustling paper. Arthur's mind swam in a sea of incomprehensibility. Ford tried to make sense of the inscrutable images floating around him. Trillian struggled with what surely must have been the ultimate secrets of the universe. Zaphod wished he had something to drink.

They stopped floating and settled firmly on to the rapidly solidifying landscape. They

looked around themselves in bewildered amazement.

Arthur broke the silence. "So this is the afterlife."

"Strange, I didn't think it would be so crowded," answered Zaphod.

The silence continued to explode all around them.

"It's so quiet too," said Trillian.

"Yes," began Arthur. "The afterlife is a big, crowded, quiet..."

"Lecture theatre," ended Ford. "A big, crowded, quiet lecture theatre."

"And we're standing here dead, in a big, crowded, quiet lecture theatre," said Arthur.

"Weird, huh?"

There was a sudden explosion of yelling from a grey haired, wildly gesticulating man standing at the front of the theatre. "If you're going to come in late, at least sit down and start taking notes!!"

"Ah, I think we'd better sit down, guys," whispered Zaphod to the others.

There were four empty armchairs in the front row of the theatre, which the group filled. Ford looked around and noticed that most of the other people in the theatre were staring at them, except for a couple at the back who seemed to be staring into each others eyes. They were all young adults and had writing implements in their hands. He turned around to face the front again just as the grey haired man began waving a long stick at some marks on a blackboard that looked painfully like mathematics to Ford. The man started babbling at a rapid rate and Ford managed to pick up a word here and there, words like "force", "energy", "Newton", and "frame"

"So this is the afterlife," Ford repeated Arthur's earlier statement.

"Bloody boring, isn't it?" answered Arthur.

The gesticulator continued his monologue, while at the same time repeatedly throwing a duster through the air and drawing diagrams on the blackboard. Zaphod squirmed in his chair. This was almost as bad as that Vogon poets convention he'd been caught at once.

"I need a drink," he mumbled to himself. "Hey kid," he said to the unsuspecting student

sitting next to him, "where....um....can I....get a drink?"

The girl seemed not to notice him at first. She kept writing in a large notebook and glancing up from time to time at the lecturer. When the lecturer turned to write some more obscure looking symbols on the board, she whispered to Zaphod, "Well, the arts students seem to like Manning Bar."

"Oh yeah? Sounds cool," Zaphod whispered back. He turned around and in a rather

louder voice said, "Hey Ford! They've got a bar here!"

Before Ford could answer, there was a terrific crash as the stick the lecturer had been pointing with smashed on to the desk in front of him. He glared at Zaphod and said, very slowly and evenly, "Can I help you?"

"Er....I, that is, we....er....wanted to know where the....er....bar is."

"Are you an arts student or an engineer?" queried the lecturer.

"Ah, well...you see...we've...um...only just arrived here," Zaphod ventured.
"Late enrolment?" shot back the lecturer. "You'd better go over to admin and get a lab allocation. Go on, down the hall outside and at the end on the right."

"Hey....what....but...."

"Now don't argue. Hurry along."

Zaphod rose slowly to his feet and said to Ford, "Come on, let's get out of here. This

guy is weirder than I am."

The rest of the group stood up and followed Zaphod, now purposely striding toward the door. Arthur and Trillian shrugged at each other and pushed their way through the heavy swing doors behind Zaphod and Ford.

The Hitch Hikers Guide to The Physics Building is a wholly remarkable book. From the great publishing houses of the University Printing Service, it has outsold such blockbusting works as Torture Through Labwork by Brian McInnes, Plasma and Why I Like It by Max Brennan and even Don Melrose's enormously popular trilogy Where Neil Cramer Went Wrong, Some Of Ian Johnston's Greatest Mistakes and Who Is This Jeremy Anyway?

"The Physics Building," the book begins, "is big. You wouldn't believe just how mindbogglingly big it is. You may think it's a long way from Wentworth Building down to Manning Bar, but that's just peanuts compared to the Physics Building. Avogadro's number multiplied by the speed of light multiplied by infinity factorial is the kind of concept we're trying to get

across here."

After a while the style settles down a bit and the book begins to tell you the sort of things that you need to know in order to survive through several years of doing university level physics. For example; the best way to get a good mark for a prac out of a second year lab demonstrator is to offer them several good stiff drinks, preferably during their four o'clock tea break, heavily laced with dry ice and other substances, and then take your logbook to be marked before the effects wear off completely. Not only will they be too incoherent to ask any difficult questions like "Why doesn't the current extrapolate to zero at 0°K?", "What does this imply about the quantum state of the mercury ions?" or the dreaded "Where are your error bars?", but you will also be able to guide their limp hand into writing a nice big "D" on your book.

Ford, Arthur, Trillian and Zaphod found themselves in a long hallway, receding off into almost endless distance in both directions as if in an attempt to prove that parallel lines really do meet, with numerous doors along each wall and a staircase leading up almost directly opposite the door they had just come out of. The whole place was deserted.

"Well," Trillian broke the silence, "now what?"

"Let's look for the bar," said Zaphod.

"Why don't we try working out where we are, seeing as we're obviously not really dead," said Arthur.

"I don't know," answered Ford. "This place looks pretty dead to me."

"Shhh!!!" hissed Zaphod suddenly. "Did you hear something?"

"Yes," began Arthur, "Ford just said that this place...."

"No, you idiot! Not that! Listen!"

Four pairs of ears strained in the silence. The noise was a faint shuffling sound, in the distance. It was getting closer. It seemed to be coming from both ends of the hallway. The group looked at each other with wide eyes, calculating the precise moment that would be the best for breaking out into mutual uncontrolled panic.

"Quick!" said Ford. "Up the stairs!"

In their crazed dash up the flight of stairs, none of the group noticed that the sound seemed to be coming from that direction more loudly than any other. As they reached the top of the stairs, an all too familiar figure appeared from around the corner on the next floor. The familiar slow, shuffling gait that had been an every day sight until the seperation on the surface of the fabled planet of Magrathea, coupled with the bearded face and the distinctive body shape, instantly identified the source of the noise to them.

"Kevin!" yelled Arthur, Trillian and Zaphod in unison. "....The potbelly postgrad, " added Ford slowly.

"Oh god, not you lot again! How utterly depressing!"

To Be Continued.

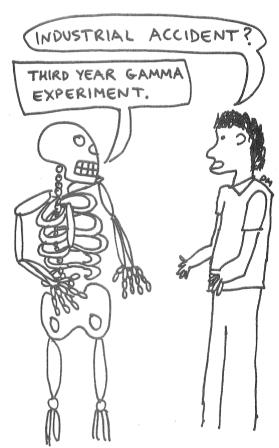
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Welcome To First and Second Years Party

t = Wednesday, 19th April, 1pm x = Physics Backyard\$ = \$3 for Physoc members, \$5 for non-members (includes membership)

Physoc presents a Solar Barbecue, open to anyone interested in good food and drink, especially first years or even second years who haven't fully familiarised themselves with the Physics faculty yet. So come along and meet the other crazy people who do physics!

(The physics backyard can be reached by exiting the main building via the door hidden under the right hand staircase opposite the main entrance.)



Another Announcement Another Announcement Another Announcement!!!!!

Physics Society Lunchtime Talk

t = Wednesday, 12th April, 1pm x = Lecture Theatre 8

Dr Ian Johnston will be presenting a highly informative and extremely entertaining talk, in his usual energetic and colourful style, on a topic which even he hasn't worked out yet! So, for all of you who have never had the chance to hear Dr Johnston lecture, this is the perfect opportunity to atone your sin. Everyone else, of course, will not want to miss this event for anything in the world, as they know we really are telling the truth here - there do exist entertaining lecturers! Watch for more details (like what the heck is he going to talk about?). **J**