

## Fass is On Its Way!

Yes, Fass has finally arrived! In just a few more days, the funniest show on campus will hit the stage -- and what a show it will be!

As you may already know, the theme for this year's show is "Spies and Spying", but there's lots more to it than that. There are bumbling insurance agents, some dancing robots, a high-powered research team, a feeble-minded company president, some co-op students, a seductress or two, and lots of little elves.

(that's right, elves!)

(no, I have *not* been drinking!)

(really, elves!)

The plot is kind of complicated (sometimes we don't understand it all ourselves), but it centers around stealing secret plans from other countries. Along the way we manage to visit the North Pole (by submarine, no less!), destroy Buffalo, and save the world. (and that's just in one act!)

Fass comes but once a year, and we've been at it since 1963. (Ah, the good old days). The show is singing, dancing, acting, clever puns, rotten jokes, and the occasional lighted-hearted jab or two at the pleasures and perils of life at Waterloo.

In the past, we've spoofed gangsters ("The St. Valentine's Day FASSacre"), ocean adventures ("Ships that FASS in the Night"), and life in the not-too-distant future ("Days of Future FASS"). Every year, dozens of outgoing and fun-loving would-be actors, singers and dancers get together to put on a show that brings Waterloo to its knees with laughter and to its feet in adulation. (forgive our immo-desty!)

This year it's "FASSified Information", and it's for your eyes only! (Feel free to bring along any warm and breathing bodies, though -- the more the merrier!)

If you don't think there's a lighter side to undercover work, then FASS '81 is a must-see. From debonair cloak-and-dagger types to devious and delectable temptresses, from Dinah Might to Yves Dropping, from Major Breakthrough to General Degree, from the R.C.M.P. to the agents of N.A.S.T.Y., we have them all!

The show is put on by the Faculty, Administration, Staff, and Students of the University, so you're bound to see some familiar faces on stage. That's part of the fun -- seeing friends and loved ones up on stage, delivering some of the best (and worst!) one-liners you've ever heard.

Not only is the show performed by University talent, it's also written by a fun-loving group of rowdies right here on Campus, giving it a distinctly UW feel. If there's a major institution at this University that we don't poke fun at, we'd sure like to know about it!

Above all else, Fass is *FUN!* Fun for the actors, fun for the techies, and most of all it's fun for you, the audience. You're the ones we put the show together for, and you're the ones who see it. (Sort of makes sense, doesn't it?)

The tickets for this year's show are going well, so get them while you can! The Friday and Saturday shows traditionally go FASSt, and this year seems to be no exception. The Friday late show is almost sold out, and the early show is picking up too. You can get your tickets by going to the Box Office in The Humanities Building (also called Hagey Hall, just to confuse people). If you're lost, call extension 2126 and ask for directions.

The show will be put on the 4, 5, 6 and 7th of February (Wednesday through Saturday), at 8:00 pm (except Friday, which has one show at 7:00 and a late show at 10:00).

See you there!

Bernie Roehl

Friday, January 30, 1981

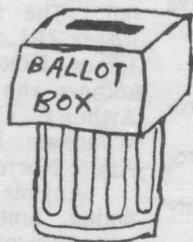
Volume 25, Number 3

# math **NEWS**

## Grad Photos

Graduating Math students may sign up for grad photos in the Mathsoc office. MC 3038

Joe Walker  
MBG '81 COMMITTEE



## Important!

(Really)

The CSC's curriculum group is starting up, and we need your help. If you want to change the CS curriculum, please sign up on the CSC's door (MC3037).

Also, WPIRG is organizing a conference on computers and society. If you're interested, goto CC135 at 10:30 tomorrow morning.

For more information on both of these activities, see this week's CSC Flash.

## Monologue

-with Brad Templeton

*"If the future is determined, then it doesn't matter what you think - it will never make a difference. If, on the other hand, we are free, then the determinist is wrong and may be ruining his life. Is there any other choice left?"*

The conflict between free will and determinism - the chances are that we will never know the truth. In the meantime, we can only (and always will) speculate on the answer. The whole question is central to many topics, including justice, dignity, time-travel and religion. This week, **Monologue** will examine a few of them.

As you can probably guess from my header, I am not a determinist. Since there is no proof either way, my decision is arbitrary. I have more reasons than I give in the quote, however. Preliminary evidence might suggest that the world is, in fact, determined. Physics attempts to put all large scale events into an exact system, with no room for quantities such as free will and original thought. If human beings are nothing but matter, and matter follows strict physical laws, one would have to conclude that we are determined. If you wish to believe we are not, you must either believe that humans are more than matter, or that physical laws are not strict.

Religious people who wish to believe in free will usually attempt to ascribe to man something like a 'soul'. Whatever form it takes, the soul is always some entity that transcends the material world, and thus can be free. This concept runs into some difficulty, for it requires a great leap of faith, and can be hard to swallow, all other things being equal. I prefer to examine the other possibility.

For some time, modern physics has known that quantities on the microscopic level can never be determined with complete accuracy by other things. This is a result of the "Heisenburg uncertainty principle", which states that the product in the errors in position and momentum

of a particle can not be less than Planck's constant over  $2\pi$ . Explicitly, this means that we, as creatures in the physical universe, can never know anything exactly. Some, however, will take this one step further. It can be argued that since a particle's exact position can not be determined, it in fact does not exist. This means that a particle does not have an exact position, and thus such information can not be known to man or omniscient god. This can imply that the universe is undetermined, random and unpredictable on the microscopic level.

What relation do these microscopic uncertainties have on the issue of free will? Human beings are, after all, rather large things, and it should not make much difference if our position is uncertain by a few fractions of an Angstrom. The answer comes when you consider what is special about higher forms of life - in particular, the fact that we are controlled by a brain. This brain works by small electrical impulses, on the *microscopic* level. This means that random influences can come into effect on creatures as large as ourselves. Life can have free will because it is a macrocosm controlled by a microcosm.

One difficulty commonly arises if this view is taken, however. Many find it difficult to reconcile their 'free will' to random happenings at the atomic level. This question actually leads to one of the problems with the 'soul' theory, namely, what is meant by 'free'. If free means "without cause or predictability", then it is essentially the same as 'random'. This implies that the brain is mainly a processor and channeller of random inputs. A more creative mind is one that can quickly and easily build these random inputs along complex chains of reasoning. This also explains one of the major differences between human intelligence and machine intelligence. While humans are intended to process random data, machines are intentionally made as deterministic as possible.

If we are free, what does this imply? Well, for one, it means that time travel will remain forever in the realm of science fiction. If people were allowed to travel from time A to time B, with  $A > B$ , this would mean that time A was set at the time of B, since those in B's reference frame would see the time of A as the future. Some schemes try and explain time travel with other 'dimensions' of time surrounding the normal one, but in a free universe, you could never travel in the highest 'dimension' of time. (Interestingly enough, a ship arriving from the future would give proof to determinism, but the lack of such an event can not verify the converse.) Additionally, our freedom means that the Christian god can not be eternal, since neither god nor man can know a future that does not exist yet. (Many people have trouble accepting this point because it contradicts a mistaken church doctrine.)

This has mainly been a rambling expression of my views on this issue, but I hope it has stimulated some thoughts in your own mind. Before I close, I would like to remind all my readers to purchase tickets for FASS as soon as they can. It is surprising how many people on campus have never seen FASS, since for \$2.50/\$3.00 it is surely the best entertainment value a UW student can find anywhere. If I seem biased (do I ever seem otherwise?) it is because this is my second year of involvement with FASS. Perhaps if you see it this year you will consider getting involved next year. My involvement in FASS changed my life significantly, and it can do the same for you. Of all the organizations I have seen or been a part of, FASS shines out as being an 'un-clique'. No matter who you are on campus, we want you to join. See you at the show.

## WATSFIC News



The **WATSFIC** (University of Waterloo Science Fiction Club) executive were selected at the meeting which was held January 21st.

President: Robert Byrd  
Secretary: Brian Dorion (re-elected)  
Treasurer: James Nicoll (re-elected)  
Secretary of War: James Bentley

As his first act in office the Secretary of War announced that the AD&D Tournament for this term would be held on the weekend of March 7th and 8th.

The latest issue of the club's

newsletter announced the results of the science fiction poll which was held last fall. The highest rated authors were Roger ZELAZNY, J.R.R TOLKEIN and James HOGAN. Some of the other authors who did well were Isaac Asimov, Arthur C. Clarke, Robert Heinlein, John Wyndham, Frank Herbert, Larry Niven, Andre Norton and Poul Anderson.

Anyone who is interested in science fiction, fantasy, gaming and movies is quite welcome at our weekly meetings. The time and location of the meetings is posted on the **WATSFIC** door (M&C3036 across from the math lounge).

djmullin





## The Galumphing Gourmets

**Shin Shin** 105 Victoria Street S., Kitchener.

A real Szechuan restaurant in the heart of downtown Kitchener. Peking specialties are also available, together with a selection of Cantonese dishes for the unadventurous.

Especially recommended are the Szechuan dishes: Hot and Sour Soup; Hunan Beef; Pork with Hot Garlic Sauce; and Chicken with Dried Hot Pepper Sauce. After the Hot Garlic Sauce you will be safe from Vlad Tepes and his friends for some time in the future.

On at least one hour's notice, they will prepare Smoked Duck in Tea Leaves or Peking Duck. To date none of us have thought about it in time, but we are intrigued.

Plain boiled rice here is not their best dish, to say the least. When it comes to plain rice, we prefer it a little on the sticky side to make it possible to eat it with chopsticks. Fried rice is one of the better things. There are several types ranging from egg fried rice to Shin Shin special fried rice. These two, at least, are very good.

Tea served in this unlicensed restaurant is generally Oolong, but Jasmine is available for those with fancier taste. Desserts run to the usual Chinese specialties, but we recommend especially the Almond bean curd with fruit, and the fried banana.

This is a tiny place. It is open from 11:00 to 23:00 weekdays and 16:00 to 23:00 on Saturday and Sunday. There appears to be a rush at 18:00 that lasts to somewhere between 19:00 and 19:30. Reservations are NOT taken, so be guided accordingly.

Prices for a full meal run about \$8.00 per person in a group of two to six. Order in writing, by number, and check to see that your order is understood. No cards.

**Rating:** 2.0 bunnies

**Previously Rated.**

**Cassidy's** 405 King St. N. (at Weber).

A moderately priced western-style eatery. Foods range from steaks to salads. A good spot for vegetarians, as the salad bar is eclectic. Exceptional value for Sunday brunch at \$5.00 per person, unlimited hot and cold buffet. Licensed, major credit cards. \$8 - 10.00 per person.

2.0 bunnies.

**The Stone Crock** St. Jacobs

Reasonable family-style dining. All you can eat for a fixed price. Scrumptious soups, salad bar and boarding-house style table service. Desserts a la carte. No licence, major credit cards. \$10 - 12.00 per person.

jcwinterton et al.

## Euchre

Partner: Why didn't you go alone?

Dealer: Because I can't take all the tricks by myself! I need you to take at least one.

Partner: Well, it's obvious you don't need my help.... you've taken my only support card!

This usually occurs when the dealer has blindly assumed that his partner's hand can weather any form of pilfering and has, without thinking, drawn a needed trump away from it. Obviously if support is required, then the dealer should have made every attempt to use what little strength there may be in his partner's hand before exploiting his own trump.

Since partner was unable to indicate anything to you during the making of trump (except that he could not play alone with the offered card as trump), that the best situation you should imagine is that you are being supported by a very weak hand. A good strategy is first, obviously, to cash high cards in your own hand attempting to build a cache of non-trump tricks to give you a little more leeway in deciding what to do next. If your partner has any voids and trump, this is a good way of gauging his strength and finding an entry to his hand.

Assuming then that you have no real cashable off-suit cards, you might as well choose some random card and see whether your partner can take it (trump or otherwise) or place the lead with the opposition. If they trump it, there is one less trump to worry about, but if it does go to them through normal channels, either you or your partner now has a chance to get some low trump through on the following lead.

By not leading trump your partnership has the option of voids in some suit by throwing off on some trick and leaving the option to your partner if his support is needed that badly. You have incidentally shown him a suit that you can trump, if he ever regains the lead.

Most importantly, though, is when the dealer holds a weak trump hand, which is generally acquired through the kind of aggressive strategy for making it that I have already advocated, that playing to partner is paramount. In such a case, the dealer is hoping to be able to use his trump to nab off-suit tricks and then give the lead back to the opposition with his non-trump. Situations such as this can set up cross-ruffing, which is when one partner leads a card and the other trumps it and then he comes back with an off-suit loser which partner trumps, etc. In this way, hands with very weak trump are able to beat considerably stronger hands.

As an aside, if you have both bowers and the ace, it should still be carefully considered when to draw trump. Often that act will weaken your hands so much that you are unable to grab the loose tricks at the end of the hand. Here, I would probably only draw one round of trump and go to the off-suits (maybe two rounds really since I have the ace to fall back on!).

In this hand the 10 of spades is offered, picked up and the 10 of clubs discarded. From east we could expect one of two leads, if he pushes the right bower throw first, he will win the first trick taking a trump from everyone; leading the right is hardly a good move, since he has good support in his own hand and the right will always take a trick. He has also taken away the lone trump in his partner's hand. (It should be noted that it is nearly always worthwhile to play for the euchre!) He should then lose the ace of clubs, followed by heart and diamond leads. More realistically, he should have started with the ace of diamonds, assuming it might go. Even if it didn't (if west had a void), west would likely throw off creating an important void and the dealer would have to dig into his sparse trump collection to take it! The other two necessary tricks follow as before.

♠ Q  
♥ K  
♦ J  
♣ KJ

♠ K  
♥ A  
♦ 10 9  
♣ 10  
DEALER.

♠ 9  
♥ QJ  
♦ A  
♣ 9

♠ J  
♥ 9  
♦ KQ  
♣ A

OFFERED: 10♠



## CSC Flash!

On Thursday the 22nd, the CSC held its first meeting of the term, and it contained something for everyone. The appetizer consisted of the termly elections for executive posts. It was a close election, with one post being won by only one vote, and an acclamation only for president (though there were two nominees for this post, one withdrew at the last minute). The following people were elected: Rohan Jayasekera (Treasurer), Guy Middleton (Secretary), Ashok Patel (Vice-President), and Peter Rowley (President).

A couple of announcements constituted the second appetizer. The CSC, in its relentless drive to express the students' will, has formed a Curriculum Group which will meet weekly to hammer out a position on the CS curriculum. If you're interested in making your views known on the structure of your education, please sign up on the CSC door, indicating when you *can't* attend a meeting. We'll try to pick a meeting time when everyone can attend.

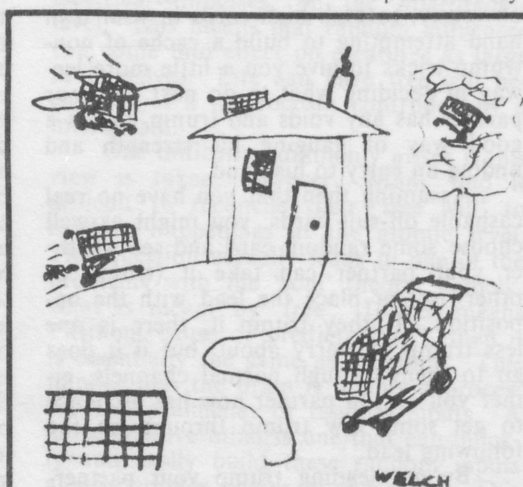
Another public-spirited group, the Waterloo Public Interest Research Group (WPIRG), contacted the CSC last week with some interesting plans. It seems that they have had a lot of inquiries from third and fourth year students wondering about the ethics of their work. Sure, they've had good work terms, and their employers have been pleased, but the work they're doing is *putting people out of work* and it's got them worried. WPIRG would like to answer that concern by holding a conference on the interaction between computers and society approximately one year from now. Depending on interest and funding, the conference could last from a day to a week. If you're concerned about the effect our field has on society, you might drop by the WPIRG office in the Campus Centre to let them know you're interested. The people there are friendly and willing to listen to your point of view. I would also urge people with strongly positive views of computers to contact WPIRG. With your participation, we can have a balanced conference. And, of course, if you're willing to help out at the conference or during its preparation, all the better. **(Late news: There'll be a brainstorming session for the conference tomorrow, January 30, in CC135 at 10:30 A.M. to 12:30 P.M. (or less))**

Finally, the main course. Peter Fraser, of the Math Faculty Computing Facility, wrote a text editor (actually a Fast REDactor) called FRED for use on the Honeywell 66/60. At the meeting, he explored FRED's guts, from the way text is stored in the system (on disk, but cached in memory in a linked list) to the way pattern matching is done (the

expressions are parsed into trees, the trees are optimized, and then pattern matching primitives are compiled from the trees). He concluded his talk by describing his marketing philosophy: anyone can have FRED free... for a year. After a year has gone by, running the program elicits the response "program expired". Should a devious system programmer patch out the message, the program prints "This program can protect itself". If the evil system programmer fails to heed this message and patches it out, the "once in a blue moon code" comes into play. Once in a very long time, after a certain number of editing operations (and *never* when the program is being traced), FRED will erase all the files it can find. And the code that does this is constructed at runtime, so it is all but impossible to defeat.

The meeting concluded with dessert: doughnuts. Watch mathNEWS or posters around the math building for announcements of future meetings.

peter rowley



### Don't forget...

Entries are now being accepted at mathNEWS, MC 3035, for the (First Annual?) mathNEWS Shopping Cart Shopping Spree Contest. In case you missed the introduction two weeks ago, you should know that what is desired is a 3 x 5 print, black & white or colour, of your favourite scene involving the presence of a shopping cart. Entries will be judged according only to originality; quality of photography is only important in that we want to be able to tell what blobs are shopping carts and what ones aren't.

Again, a reminder that we'd prefer not to encourage the removal of carts from store lots. Heaven knows there are enough wild ones, and besides, we think that foundlings tend to be more cooperative and photogenic. The contest closes on Tuesday, March 10, 1981 at 12:00 noon. The prize: aha! You should know! Think toothpicks!

YFE

## A Blue Banana In a Monkey Den

What does that mean? I haven't the faintest idea! But what a concept, eh? Think about it! The pages of mathNEWS could be filled with such concepts, if there were only people to take them out of the air and put them onto paper. The magical thing is that anyone can do it; you don't even have to write well-- we'll take care of that. (Which is not to say we'll beat you until you learn to write well, even if Behaviourism is *a la mode* (with ice cream?)-- we'll take what you give us and punch it up a bit, fixing spelling and such.)

In fact, we'll do more than that: we'll even tell you what some of the concepts *look* like, so you'll recognize them when they fly by. Some look like news and features particular to certain departments in the faculty. Something must be going on in departments other than CS-- but mN readers never hear about it! Math students are people too, living (ok, existing) in the Waterloo area. *What goes on around here?* Seen a good movie, read a bizarre book, tasted a good dessert? Done something interesting, crazy, criminal? Don't keep it to yourself-- please; *(Get it out in the open! I know I have...)* just write your comments down on a piece of paper and put them in the mN box on the 3rd floor or send them to userid mathnews on the Honeywell. It's really not that difficult, and think of how much fun it could be... and remember what Ronald Reagan said when asked how he would cut income tax, increase defense spending, and balance the budget, all at once: "It's very simple. We'll keep two sets of books".



### Motorcyclists:

It appears that during the last few terms there has been an increasing incidence of theft of motorcycle mirrors. Since this is something which is hard to prevent, we'd like to advise you to check with Security, who will engrave your name in them for free, in addition to providing a sticker to that effect.



## Young Frank Einstein

*forgot to remember not to forget to remember*

Yes, that's what I did, all right. After substantial dramatic buildup and not a single response, I forgot to remember to give you the answer to that little pseudo-paradox about Sunday and Tuesday. Herewith is one last reprint of the relevant passage:

How do you know what day it is? I see you have a nice watch there.  
 "Well, within the limits of... reasonable doubt, I suppose... I believe what my watch tells me. If it looks wrong, I'll reset it, or change the batteries, or something. Right now, it's just before midnight, I think."

Tuesday?

"No, it says Sunday. How about yours?"

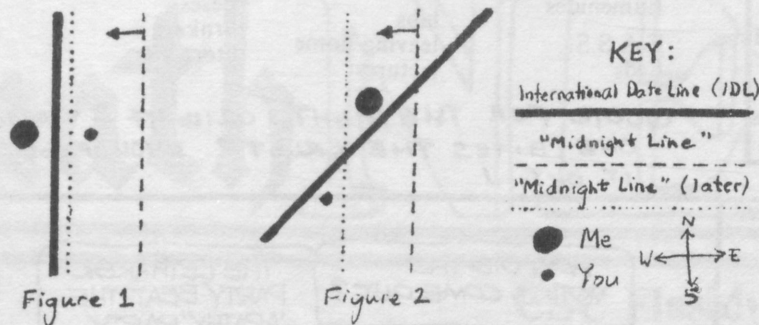
Tuesday, it is. Check yours again. I know it works.

"Sunday, clear as day. This is insane. This can't be Waterloo..."

That is correct. This is the rationality of the human; a brilliant illustration. I think, don't you? I can see you don't believe my means, young man.

First we must assume that the Devil doesn't lie. If so, then the statement "This can't be Waterloo..." must be correct, as he says. A later clue indicated that the subject was floating, suggesting an ocean. Recalling that the International Date Line separates one day from another at all times (if it is Sunday on our side (east), then it is Monday on the other side (west)). This we know because there is only one time zone enveloping the line; it is in effect on both sides of the line.

Now let's assume that we're floating, you and I, just on either side of the line. It's just about 11:59 p.m.; on your side (the east), it's Sunday night, and on my side it's Monday night (just finished watching the football game). To the east of you, it's later than it is where you are; since the Devil is what he is, he doesn't believe in Standard Time, so time varies continuously as you travel east-west. So just about 40 miles to your east, it's about midnight and becoming Monday morning. Just after your watch starts to read Monday, mine switches over to Tuesday. We could visualize this with a diagram like that in Figure 1.



Now you can see that if I ask you what day it is, you might say Sunday; but then if I say it's Tuesday where I am, by then it must just have turned to Monday where you are, so you can't get the Sunday-Tuesday-Sunday sequence given in the problem. So how does that work?

Let's not forget that the IDL is not straight! Because it was desired to keep all of the U.S. on one side and all of the U.S.S.R. on the other (not including territorial possessions like Guam), the IDL was bent to avoid land masses like Kamchatka and the Aleutian Archipelago. Now let's assume we're floating some small distance from each other on either side of the line in a locality where the line slants relative to lines of longitude (see Figure 2). While I'm still on the west side of the line, topologically, I'm actually floating some distance northeast of you. Now, as before, we can imagine a "midnight line" sweeping across the globe from east to west. As the scenario begins, it's almost midnight, and it's Sunday on your side and Monday on mine. Since I'm to your east, it becomes Tuesday for me *before* it becomes Monday for you — the "midnight line" reaches me first. Now, while it's still just a second or two before midnight, I ask you the time. You say, "Right now, it's just before midnight, I think." I ask you if it's Tuesday. You say, "No, it says Sunday. How about yours?" Meanwhile the "midnight line" crosses my position, so when I respond, I say, "Tuesday, it is. Check yours again. I know it works." But the "midnight line" hasn't quite crossed *your* position yet, so your watch still says Sunday. You say, "Sunday, clear as day. This is insane. This can't be Waterloo..."

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## Curtain Call

Unfortunately due to circumstances beyond my control, this article comes out a week late, but not a week too late. Perhaps it is better this way, for tonight the Kitchener-Waterloo community, and especially our fine university, will be given the opportunity to see a very good, inexpensive evening of hilarious comedy and musical entertainment. I'm speaking of course, of 'SUGAR'. If you have already seen the show and were for any reason disappointed, then you have a bad picture of our show. A combination of purely technical difficulties, (a snagged stage flat, a faulty headset and subsequent loss of communication with backstage were among the unforeseen) did not do justice to the months of choreography, singing, and rehearsals that have all come together to produce a very professional musical.

Working in the lighting booth and backstage before and after, I have been given the unique chance to watch this show develop and improve every night technically while maintaining its high standard of acting, singing and dancing. By last Friday the cast had been through three nights of shows and were getting tired, and yet even then, they put on their best show and got a standing ovation for their performance.

Still not convinced? Maybe you would like to hear the plot:

depression; the diversions - speak-easies, glamour girls, gangsters and night clubs. Sugar Kane, a sexy young show girl, finds herself caught up in it all. Her dream is to marry a Miami millionaire. Instead, she finds Joe and Jerry. These two, after witnessing a mob murder, escape Spats Polazzo and his gang by dressing in drag and joining Sweet Sue's Society Syncopaters, an all female band. The result is hilarious, the outcome outrageous!

I myself have been through almost every facet of a musical, from playing in the pit to onstage to asst. director, and rarely have I seen so many people put so much into one production. A prime example of this is the director, Susan Forrest, who, when faced with seemingly insurmountable obstacles, has been seen on more than one occasion picking up the cast and carrying them over. She is not alone though; far from it. Miss Forrest is backed up by one of the hardest working stage crews I have ever had the good fortune to join, led by stage manager, Lizanne Madigan. Next to the acting, an outstanding feature of the show is the choreography, the work of Deardra King, which really brings the show together.

So why is this article well-timed? Tonight, Friday 30, and tomorrow night, those who search for entertainment will again have the chance to see the musical

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Just thereafter, your watch reads Monday, but by that time you are too puzzled to realize what a number has just been pulled on you. Just the possibility that a point just to the east of you can have a later date than your point does is puzzling enough - but in this case (if only for a split-second) it is two days later!

This ends a long drought of responses to this problem. Maybe my uncle Albert will find it amusing...

Now that I've killed that one to death, how about another, more mathematical problem. This one was shamelessly stolen from the International Mathematical Olympiad of 1977, but I think it's well worth repeating. Anyone who has read the Olympiad results book is prohibited from answering!

Let  $a$  and  $b$  be positive integers. The quotient and remainder when  $a^2 + b^2$  is divided by  $a + b$  are  $q$  and  $r$ . If  $q^2 + r = 1977$ , what are the possible values for  $a$  and  $b$ ?

If you have a good solution, put it in the PINK box on the third floor hall, or slip it to somebody in MC 3035 (Heaven Unearthed).

Young Frank Einstein

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stage version of Marilyn Monroe's smash hit 'Some Like It Hot' at the Humanities Theatre (8:30 Friday, 9:00 Saturday).

There have been line ups for tickets every night, so get there early. And for all you FASS people, if you can push for time off and come to any one of the shows, you'll get group rates. This is a show you won't want to miss.

See you there.

Andrew Welch

## Word Search

Theme: UW is...

Solution: 20 letters on the back of this page.

P O O C C S E M O H G N I O G  
 I U S E R U T C E L E C T R A  
 B O B O N G C S D A O F S O M  
 U E T S L A N I F F F E E S E  
 T U E M A R R R A O F E D S S  
 T D X R B I O S O A R C I S R  
 O U T E S S S D O S A O N Y O  
 N T S T H E S E S M V E E E O  
 S N E D R A W R Y E N O M K M  
 T I V I L L A G E S I T U N A  
 E R F M A L L N I G H T E R S  
 J P I T E V R U C L L E B U M  
 D M L E A V I N G H O M E T E  
 I I E C A M P U S C E N T R E  
 W L U E R E T L E H S B M O B

all-nighters	fees	mid-terms	
beer	file	money	
bell curve	finals	O.S.A.P.	
Bombshelter	F.O.A.D.	pi buttons	villages
Campus Centre	food	profs	warden
co-op	frosh	pubs	WIDJETs
Electra	Games Room	Sugar	W.L.U.
E.M.S.	going home	texts	
Eumenides	Imprint	theses	
F.A.S.S.	labs	turnkeys	
Feds	leaving home	tutors	
	lectures		

QUOTE FOR THE NIGHT: 02:16:47 - "ANOTHER ONE BITES THE CRUST" (YOU FIGURE IT OUT!)

MASTHEAD: HI! I'VE FINALLY GIVEN UP ON OUR STUPID TYPEWRITER. (AND IT'S ONLY 2:29:59, EVEN AFTER STAYING AT FASS REHEARSALS PAST 23:00!)(TAKE THAT IAN!) LOTS OF HELP CAME FROM A FEW LOYAL FOLLOWERS: TRACEY ALLEN (COOL AIDE, apologies to FASS, +VIST SUPERB! STRAIGHT(!) LINES, LAYOUT, etc) DAVE LKKSPITTLE (LAYOUT) ANDREW "REGGIE" WELCH (LAYOUT, GRAPHICS, SUGAR, - YOU TRAITOR!!!), WILLIAM HUGHES (PHOTONEER, LAYOUT, PREVIEWING), P.S. TRACEY'S A TECKIE (FIGURE'S); DAVE BUCKINGHAM (EUCHRE, PREVIEWING, PHOTONING), PETER ROWLEY (PREVIEWING); PIZZA PIG (FOOD!!!). WRITERS WERE BRAD TEMPLETON (MONO), DENNIS MULLIN (WATSEIC) BURLOAF (EUCHRE)-already mentioned but well deserving; JC WINTERBORN'S DINNER GROUP-MORVIA & JANE GENTLEMAN, ALAN BOWLER, JOHN PLAICE, KEVIN MARTIN, KGDYKES & TOI ANDREW WELCH (CURTAIN CALLS, ROSS BROWN LYFE),

ISSN 0705-0410

A weekly (sometimes biweekly) publication of the University of Waterloo Mathematics Society. It is funded by, but independent of, MathSoc, and is the only weekly newspaper on campus with an all-volunteer staff. Content is the responsibility of mathNEWS staff and editors. mathNEWS, MC 3035, University of Waterloo, 200 University Ave. West, Waterloo, Ontario, N2L 3G1.

PETER ROWLEY (CSG)  
 BERNIE ROEHL (FASS)  
 JOE WALKER (M.G.S.) &  
 ME,  
 CRUMHORN G'NITE!



apologies to B.C.