

mathNEWS

Volume 42 Number 2

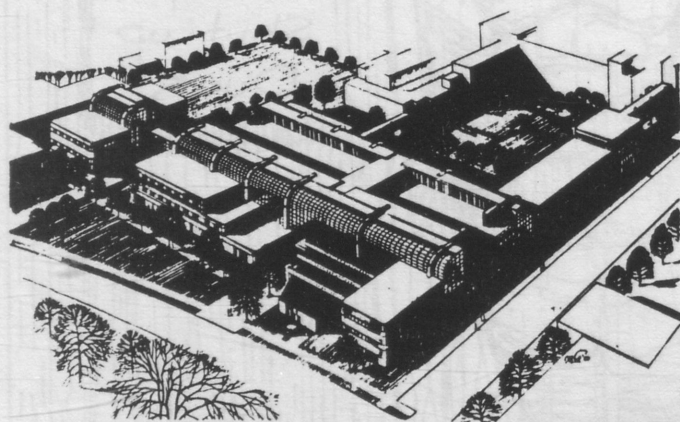
Friday, October 3, 1986



WELCOME TO SUNNY (WATER)LOO.....

Look Ahead

Math Events
Oct 3 Course drop deadline
Co-Oops Only
Oct 16 Interviews begin
Oct 23 Interviews begin (AM/Eng)
Fed Flicks \$1 Feds, \$3 others
Oct 3-5 White Nights
Oct 10-12 (No Movies - Thanksgiving)
Oct 17-19 The Jewel Of The Nile
Cinema Gratis 9:30 in the CC—it's free!
Oct 8 Time Bandits (Short : Jetee)
Oct 15 What's Up Doc (Short : The In-laws)
LW Arts Centre
Call 885-4280 for more info and tickets
Oct 3 The Royal Canadian Air Farce
Oct 9-11 Macbeth
Oct 20 Lili Marleen (International Film)
Other Events
Oct 3 Chalk Circle at Fed Hall
Oct 4 TheatreSports (Improv Comedy) St. Jerome's 8PM
Oct 5.8 FASS Writers meetings 7-9pm, MC5045
Oct 6 Arthur Andersen W+C with presentation NH3004 6pm
Oct 9 AM Club seminar: Mathematics of Flight
Oct 16-17 Oktoberfest at Bingeman Park
mathNEWS
Oct 6 Issue #3 submission deadline.
Oct 6 Next production night
Oct 10 Next mathNEWS comes out



THE WILLIAM G. DAVIS COMPUTER RESEARCH CENTER

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Editor: Paul D. Obeda

Prezz Sezz

C+D Business and Other Stuff

By now everyone has noticed the C+D price increases. I would like to take this time and explain the reason for this. Up until this term, the C+D prices were extremely low, the lowest on campus, and remained unchanged for several years while the cost of food had always been increasing. Because of increased operating costs and the fact that financial statements were only available for the previous term during the following term, the financial state of the C+D remained hidden until it was too late. One cannot change prices midway through a term. For a while the C+D was making a profit, which in turn was re-invested. With this money we were able to renovate the lounge (in case you didn't know, through the C+D, students indirectly paid for the furniture). The C+D lounge will soon be renovated. You may think we didn't need all of this, but it does dramatically increase the attractiveness and comfort of the Math building. Eventually furniture does deteriorate, and repairs are just as costly as buying new.

Some money was also put towards two bursaries, appropriately titled, Natural Log Bursary and Pink Tie Bursary. These in turn benefit students directly who are in financial need.

If you are not happy with the way the money was used then you should have gotten involved and spoken out at one of the MathSoc Student Council meetings. You can voice your opinion at the upcoming MathSoc General Meeting, to be held later this month.

There is also a new problem that has been sitting in the wings but is now coming to the forefront. Food Services & Company are getting envious of all societies' C+D's. Just recently they approached the Arts C+D in Hagey Hall wanting to go into partnership (effectively controlling), which would result in price increases. The alternative was going into competition, which is now the most probable outcome. We as students have the right to operate C+D's to give students a break on prices. We do not offer the hot foods Food Services establishments serve, so why do they complain? Most C+D's are not able to expand so they are at an operating limit. If Food Services were to take over a C+D upon expiry of a lease of operating space, beware. The students will organise themselves and take whatever action is necessary to fight them. I know for a fact that several Deans are fully supportive of their students' C+D's, so students will not be the only ones screaming.

If you have any further questions or complaints, please voice them to MathSoc (MC3038), and not to the cashiers—they only work there.

Just a final note. It was great to see all the BB/BS and Frosh at the Bombshelter last Friday. Sorry for those who couldn't get in because of their age. Feel free to join us every Friday for the rest of the term. Great video, Adam. Congratulations to the Pink Flamingos for a great race. Till the next issue,

Willna

A Note From the Editor

Well, I was going to have some beginning of term remarks last week, but then I ran out of space and wound up cutting out every other paragraph. For one thing, I cut the first paragraph, in which I claimed to not have found a way to start my remarks without using 'well' as the first word.

As you will have noted, we are accepting outside advertising. This is to provide you with more, bigger, better mathNEWSes.

Congratulations to all those on the Dean's Honours List in the recent past. See the lists posted on the third floor. It is interesting to note that a couple mathNEWS staffers are included.

The picture of the ICR building (as it might have looked this August when it was finished) was culled from The Financial Post. Or so I am led to believe. It may have been associated with an ad from Spantec.

continued on p. 3

Want Ads

As all co-op students can verify, there are almost always some pretty silly miscues in any issue of the Want Ads. Often it's just a matter of proofreading, but one can never be too sure ...

In the spirit of informing all those unfortunate students who are not going through interviews this term about what wonderful jobs they are missing, mathNEWS presents its regular WantAd Awards.

"Aren't they asking for a bit too much" - Rogers Cable, which demanded "... must be familiar with COBOL and possess god organisational skills".

"Deceptive little place. ain't it" - Speedy Muffler, where students can work at the MIS-Information centre (obviously for students not informed about MIS).

"I'd apply but I don't know what they want" - Bramalea Software, where "generation languages would be useful, but not be useful, but is not required". Take your pick.

"It sure seems that they need a lot of students", or "Desperate. huh?" - Cemcorp (that's right, not IBM, who wants sixty-four students) wants these disciplines: AE, AM, AN, AS, BA, CA, CO, CS, EG, IA, OP, PM, PS, PY, SA, SO, ST, TE, TW. ... Why not KI and RE?

"My hand doesn't work like it used to". This one is dedicated to the Rec students who signed up for interviews with East York Board of Education Outdoor Education Centre Outdoor Education Assistant, or Workers' Compensation Board Hospital Rehabilitation Centre Remedial Gym Assistant. These titles are 71 and 72 characters long, not including blanks.

"There's always room at the top" to all CA firms, especially STARKMAN, KRAFT, ROTHMAN, BERGER, & GRILL, CHARTERED ACCOUNTANTS, and BRIEF, ROTFARB, WYNBERG, CAPPE, CHARTERED ACCOUNTANTS. And whatever happened to the name SMITH?

"Unnecessary Superfluous Redundancy" - Bell-Northern Research informs us that "... PDE Customer Support is a group whose mandate is to provide customer support to customers..."

"Brevity" - Mr D K Loop's complete ad: "Small public accounting firm near Windsor, Ontario seeks first or second year studies co-op student."

"Why the ELPE was invented..." - Environment Canada "... To two CYBER 830 computer systems and a NAS AS/6 mini-computers are used for collecting: coded

The project to be undertaken during this work circuits in real time; storing and decoding this to implement a new ice dynamics model into the for generating ice forecast guidance and analysis; currently running on the CRAY, must be streamlined messages on telex network and AES communications system; for remote job entry to Canadian Meteorological Centre for accessing models evaluated, and documented, plots at Ice Centre. Knowledge of any of the relevant computer functions is written in Fortran IV, Fortran IVX, and Fortran 77. ..."

Just Wondering

Class of '87 Yearbooks on Sale

That is, orders will be taken next week: Tuesday, Oct. 7 and Wednesday Oct. 8. The cost is \$15 for a 120-page book of memories. They can be picked up at convocation weekend, May, 1987.

Meanwhile, we still need ideas and pictures! If you would like to submit some pictures, please bring the pictures and negatives into MathSoc between 8:30 and 11:30 am, MWF. We will pay for reprints if necessary. Remember, the best way to guarantee that you will be in the yearbook (other than your grad picture) is to bring in your own photos!

-BP

Math Grad Committee '87

Well guys, seven more months and then it's the *real* world for us. If you've been one of those people who has actually been working hard for the last four years, this is your last chance.

The Math Grad Committee needs volunteers to help with fundraising. The money will help subsidize the MGB, which is why our ball is the best on campus without being outrageously expensive.

In addition, two new projects have been taken on by the committee. Math, for the first time, will have a yearbook. So bring in any pictures you think are appropriate (and especially those that aren't). Anyone who has had experience working on a yearbook or would just like to help out would be very welcome.

The second project is a class gift, an idea blatantly stolen from the engineers. This gift would be of benefit to future students and help improve campus life.

We're also planning a convocation weekend in village. So we can end it all on a high point.

In case you haven't heard, class sweatshirts may be ordered until today and will be available again in January. If people are interested we may also order tee shirts.

Please help support your Grad Committee by signing up to help out. A signup sheet is on the MathSoc door and important information will be posted on the board beside it. And try to make it to a few meetings because we could use your suggestions (maybe!).

Oh, yeah. Before I forget, Math Grad Committee parties and afternoons in the Bombshelter are included in this attempt to get you to help out.

Lisa Seabrooke
Chairman

The Applied Math Club presents

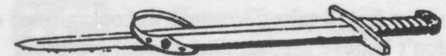
Dr. W.H.Hui

Applied Math Dept., University of Waterloo

speaking on:

The Mathematics of Flight

Thursday, Oct. 9, 3:30
in C2 171



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Prof Quotes

Bumper crop of prof quotes this week. If you're quote didn't get in this week it's because there just plain wasn't enough room. But keep them coming and we'll do the best we can.

"Back in graph theory's romantic days... finding a maximum matching was just like the dating game. That's what today's society is all about. So I hear, anyway, from my ivory tower:... Edie gets matched with Icabod... You are supposed to improve this mating... I mean, this matching—get Edie involved with Carl."

Frank Zorzitto, PMATH 352

"The rest of this, a monkey could do. At least a computer can do it, and if a computer can do it, a monkey can do it."

F. Goodman, AM 270

"It doesn't tell you where Bonzo or Ronny are, whether in a banana tree or the oval office."

Hill, Anth 101

"And yes, there was a time when there were no computers."

Al Brender, Act Sci 331

"Sometimes it's hard to talk about the inverse of a function that has no inverse."

Ng, PMATH 451

"I earn my living through maximum principles."

D. Siegel, AM 481a

"If you answer somebody else's question then at least one other person is interested."

Ken Davidson, PM 344

"It is intuitively probable."

Ng, PM 451

"If the lights go out this will be highly symbolic."

Winston Cherry, Stat 332

"We've got five minutes, that's enough time to prove a theorem. Not really like proving a brand new theorem because I've heard of it before."

Ken Davidson, PM 344

"The goal of every mathematician is to avoid as much work as possible."

Stan Burris, Math 234b

"I claim that it will take zero time to cook a roast of zero mass. Some people don't believe me but that is what I claim."

F. Goodman, AM 270

"I claim that problem is trivial. Maybe that's too strong a word."

D. Siegel, AM 481a

"From here we just sort of stand back and put on our special spectacles."

D. Wood, CS 360

"If you have something that looks really ugly you either put a paper bag over it or let u equal it."

C. Rogers, Math 130a

"Once again we are up the proverbial estuary with no visible means of propulsion."

G. Lastman, AM 260

"What's Mod? It's just a word. Mathies don't know what's mod anyway."

Dan Younger, Math 134a

"This, of course, is the cross product, which is named after me."

George Cross, Math 230a

"Syncopation is staggering from bar to bar."

Merrick Jarrett, Music 273

"You don't just drive down the street and knock over the number one."

Keith Rowe, Math 234b

"If you hit a guy while driving, get out and ask him how he is. If he says he thinks that he is paralyzed from the neck down, ask him what he does for a living. If he is 25 and says he's a resident surgeon, get back in your car and run over him a few times."

Rob Brown, ActSci 463

"What we usually do is write this as $4 = 1/2$ so that the freshmen coming in next class will drop out."

Keith Rowe, Math 234b

"If you really want to sneeze you should be up here inhaling all this chalk dust. I predict I'll get white lung before long."

Wentzell, Math 130a

"Any questions? ... Like, 'What the hell are we doing?' or 'Can I raise my salary by 5% by knowing this?'"

D.M. Jackson, Math 234a

"Why are we here? Where are we going? The great philosophical questions of all time and you expect me to answer them in two minutes?"

Wentzell, Math 130a

"Stochastic is a big word... like marmalade."

Mike Best, ActSci 335

"You could put Hitler or Mussolini here. It's just a dummy variable."

Colin Rogers, AM 381

"Genes have something to do with heredity."

W. Cleaver, Bio 111

"We love giving you complicated questions. Whenever the class average gets too high we pull out a couple of these to bang it down where it should be—about 45%."

John W. Hepburn, Chem 123

"I don't know why you guys keep laughing when I'm giving you these brilliant sayings."

F. Goodman, AM 270

Oktoberfest Tickets

MathSoc still has some tickets for Thursday, October 16 at Bingham Park. For a measly \$6 you get your \$2 admission ticket, your \$2.50 bus ride, a \$1 donation to the Math Grad Ball, and a 50 cent profit to MathSoc?

Offensive Coordinator



Bongai
Tony "Boom Boom" Fillero

The Famous Sutherland-Descartes Hypothesis

As everyone knows, Descartes made the famous quote "Cogito ergo sum" (I think, therefore I am), meaning that anything that thinks exists. You can use this and its opposite (anything that doesn't think doesn't exist) to prove that a garbage can is on a higher plane of existence than your friend. First, ask your friend "How are you?" and he will say immediately, without thinking, something like "Fine". Now ask a garbage can "How are you?". It won't answer you immediately since it is thinking about the answer. (Note: If the garbage can appears to answer you, then you need to get some sleep badly. If the C+D coffee hasn't worn off yet and you can't get to sleep, try reading a math text book for a while; it never fails.) Thus, by Descartes' hypothesis, your friend doesn't exist while the garbage can does exist. Since I don't exist as well, it makes me wonder why the garbage can isn't here writing articles about life, the universe, and everything while I am sitting around having garbage thrown at me.

The Termal Schizo

P.S. Thanks to B.S. for the idea.

Math Gnus

We join Bill, Hagar and Phil, the Math Gnus, sitting in their living room. They are on their haunches around a circular teak table. The room is lit by candles, and polytonal flute music floats mysteriously through the room.

HAGAR (whispering): Are we ready?

(Bill and Phil nod seriously)

HAGAR (to Phil): Did you get it?

(Phil carefully produces a copy of mathNEWS)

HAGAR: Bill?

(Bill accepts the copy from Phil, cautiously removes the staple and, bringing out a pair of scissors, cuts mathNEWS into three equal portions)

HAGAR (solemnly quoting): 'You are what you eat.'

BILL and PHIL: 'You are what you eat.'

(They each take a portion and, page by page, they chew and swallow mathNEWS)

PHIL (after they finish eating): Ugh!

(Phil gets up flicks on a light and switches to a top 40 station)

PHIL: Every time we do this, I always get indigestion.

HAGAR: Don't worry. The recursion of mathNEWS within Math Gnus within MATH GNUS within mathNEWS is known to cause mild heartburn in even the strongest gut. I think there are some TUMS in the medicine cabinet.

BILL (holding his midriff): It's worse this time though.

(During the following few seconds it becomes obvious that they are all in considerably more pain than the circumstances would dictate)

HAGAR: That wasn't this week's issue, was it Phil?

PHIL: Yeah, I think so. Why?

(Hagar and Bill look at each other in horror)

HAGAR: Then we are part of an infinitely recursive loop of mathNEWS within Math Gnus within MATH GNUS within mathNEWS within Math Gnus without end.

BILL: Oh God! That's worse than Village caf. spaghetti!

BILL, HAGAR and PHIL: AAAUUUUUUGGGHHH!!!!

(In a fit of screaming and bizarre physical contortions, the Math Gnus die)

DAN RATHER (grinning smugly): That's all for the Gnus, now on with sports and weather.

THE END

DK

CSC Flash!

Well, the crystal ball proved to be 75% accurate. The results of the vote were

President: Kevin Mackay

Vice-President: Rico Mariani

Treasurer: Steve Rapaport

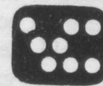
Secretary: Marion Cunningham

The Computer Science Club cordially invites you to enter the Third Annual CSC Open Computer Othello Tournament to be held Saturday, November 15, 1986.

Each competitor is required to have written a non-commercial computer program which plays the game of Othello (Reversi).

Trophies will be awarded to the winner and runners up; there will also be a prize for top finisher among undergraduate entrants from the University of Waterloo.

There is a \$10.00 entrance fee (\$5.00 for CSC members). Deadline for entries is November 8, 1986. For entry forms or more information, contact the Computer Science Club.



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Mathematician of the Week

Karl Gauss

mathNEWS is pleased to announce that the Mathematician of the Week is Karl Gauss. Below is a short biography of Gauss. It is our belief that, having read his biography, you will concur with our judgement.

His childhood years were not worth writing about.

He first gained notoriety by discovering the Fundamental Theorem of Algebra. Fortunately, he was still a student at the time, and was able to submit it as his doctoral thesis. Before Gauss' time, many advances had been made in the field of algebra (as well as in the ring of algebra, the monoid of algebra, the vector space of algebra, the group of algebra, and algebra's right coset. But I digress). Although these advances were impressive, they were not based upon sound 'fundamentals'. Every athletic coach will tell you to work on your fundamentals before you attempt to do any fancy stuff. Obviously, the pre-Gauss algebraists did not dabble much in athletics. Fortunately, Karl Gauss came along, and with the Fundamental Theorem of Algebra set the field of algebra sailing in the right direction. (Unfortunately, the ring of algebra became stuck in the doldrums, the monoid of algebra ran aground on a deserted monoid island, the vector space of algebra was lost in space, the group of algebra metamorphosed into Universal Algebra, and algebra's right coset collided with calculus' left coset and sank. None has ever been heard from since.)

News of this brilliant mathematician reached Prince Um!aut, Ruler of Lower Saxony, Creator and Chief Guardian of the Holy Roman Dribble Glass. The Prince was having a bad problem with cock roaches in his castle, which was mainly due to his brother Billy, who was a beastly slob. However, the Prince owed his brother Billy a considerable amount of money from the nightly poker games, and thus was forced to find a solution to the pest problem. He first asked the Principal Pest Comptroller to solve his problem. The Principal Pest Comptroller tried hard to solve the problem, but found it intractable. When the Prince realised that the Principal Pest Comptroller could not solve the problem, he called for the smartest person in the principality to come to his castle and solve this problem. Euler was on sabbatical, so the Prince settled for Gauss. At first, Gauss tried to beat them to death with the Fundamental Theorem of Algebra, but soon realized that such brute force methods would not work. Thereafter, he devised a more elegant way of eliminating the pests. It worked so well that the Prince, in his gratitude, put the method into the public domain. The Gaussian Elimination method is used even to this very day.

Gauss' finest hour came when he invented the bell curve. This came about as a result of his work at the University of Wormburger where he was trying to correct the high undergraduate dropout rate. He first suggested reinforcing the floors and putting bars on the windows, but this only had a marginal effect. Eventually he stumbled upon the gauss curve, which is known today as the bell curve. Gauss curving the grades had a remarkable and even positive effect on the undergraduate dropout rate. The students told their friends on work-terms about the revolutionary new technique of gauss curving. They told their friends at Wormpubs. Word of gauss curving spread like wildfire, until firemen from North Tonawonda and Cheektowaga put it out. The students gathered to decide how to honour Gauss for his wonderful contribution to student semi-sanity. One bright Scottish lad, named Alexander Bell, came up with the idea of making bronze castings of the gauss curve, attaching a knocker inside the castings, and hanging them in all the churches. Everybody agreed that this was a great idea. These devices were hung in all the churches, and were named bells in honour of the man who thought of the idea. Unfortunately, people soon began to associate gauss curves with these bells, and the term 'gauss curve' was gradually replaced by the term 'bell curve'.

Some of you may think that Gauss, being such a mathematical genius, was a bit of a nerd. Nothing could be farther from the truth.

Gauss had a sort of magnetic personality. In fact, Gauss was such a magnetic personality that people used him as a yardstick to measure the personal magnetism of people. The Gauss scale of personal magnetism is used to this very day.

The rest of Gauss' achievements are inconsequential.

indiana fermat

A Guide to Effective Scientific Communication

Phrase	Translation
It has long been known	I haven't bothered to look up the reference
It is believed	I think
It is generally believed	A couple of guys think so too
It is not unreasonable to assume	If you believe this, you'll believe anything
Of great theoretical importance	I find it kind of interesting
Of great practical importance	I can get some mileage out of it
Typical results are shown	The best results are shown
Three samples were chosen for further study	The others didn't make sense, so we ignored them
The 4-hour sample was not studied	I dropped it on the floor
The 4-hour determination may not be significant	I dropped it on the floor, but scooped most of it up
The significance of these results is unclear	Look at the pretty artifact!
It has not been possible to provide definitive answers	The experiment was negative, but at least I can publish the data somewhere
Correct within an order of magnitude	Wrong
It might be argued that	I have such a good answer for this objection that I shall now raise it
Much additional work will be required	This paper is not very good, but neither is that of anyone else
These investigations proved highly rewarding	My grant is going to be renewed
Anonymous	I haven't bothered to look up the reference

Anonymous
(found in a dusty computer by derfy)

THE CONTINUOUS ADVENTURES OF

WATMAN



When we last left our illustrious heroes they had just been renewed, only to find themselves in the hands of the Mad Statter. This most mean of villains, at variance with the rest of the world, had somehow replaced Alfred. What had happened to Alfred? What is the probability that something significant will happen to Watman and Duck?

Now that I have you in my control, you Dynamic Dimwits, there is something you must do for me.

What have you done with Alfred?

Oh, don't worry about Alfred. I have him safely bounded and gagged in a compact region. What you are going to do, if you ever want to see Alfred again, is to cause the Watham football team to win this afternoon's game!

Wholly substandard deviations, Watman! That is totally impossible! Even we couldn't cause them to win.

You will have to find a way, because you cannot escape my control until you do.

But why would you want them to win, Statter?

Because, my fowl friend, I have bet every penny I own on Watham winning this football game at billion-to-one odds to pay for the I.C.R. (Institute for Criminal Research) cost overruns. If Watham does not win this afternoon's game, I will destroy your Superhero Identification cards, so you will be powerless to protect Watham. Moreover, I will distribute Alfred randomly across my domain.

Realising that there was nothing they could do to stop the Mad Statter's deviant schemes, our luckless heroes left to try to create a Watham football victory.

Meanwhile, Alfred had just regained consciousness to find himself trapped. Whatever he did to escape, he found that the region he was in was closed and bounded.

Then, just when things seemed bleakest, who should appear to save the Dynamically Allocated Duo but the woman of the hour—Watgirl!

Quickly recognising that the function bounding Alfred was bijective, she applied the inverse function, and *Presto!* there stood Alfred.

Realising that he had lost control of the situation, the Mad Statter fled along a random walk, with Watgirl in hot pursuit. Turning into a

blind corridor, he thought he might fool his wily pursuers, but Watgirl spotted the deception, and forced him to revert to his true shape.

Immediately, he darted into an adjacent classroom. This was his gravest error, for in this very lecture hall, the dread ϵ shhead was handing out midterm exams.

You there! You're late! Sit down! Where's your ID card?

Dutifully, the Mad Statter produced his Arch-Villain I.D.

This is an A.I.D! Didn't you read the first page of the exam? 'No A.I.D.s permitted.' I'll take that, thank you.

Let me out of here!

I'm sorry, we can't permit anyone to leave the ϵ -neighbourhood of a Calculus class unless they can prove their existence and uniqueness. Can I see your I.D. please?

You just took it!

Well, if you don't have any I.D. then you don't exist, so you can't leave. Sorry.

Wait! Sir! I have a Superhero I.D. card! See? Here it is!

Ah! Very interesting. You have *nvo* S.I.D.s. Therefore, you are not unique. Therefore, you cannot leave. I'll take those. Sorry.

And the ϵ shhead seized the Deterministic Duo's SID cards, leaving the Mad Statter helplessly crying.

Oh dear! Will the mighty Watman and Duck manage to lead Watham to victory? How could they possibly do that? If Watham wins the football game, the Mad Statter will gain control of the Watham underworld! Will our heroes ever get back their Superhero Identification Cards? Stay tuned next issue, same Wat-time, same War-channel!

Na-na-na-na na-na-na-na, na-na-na-na na-na-na-na ... WAT-MAN!

The Chuckler

Grads Take Note

The firm of Arthur Andersen & Company is holding a Wine + Cheese for soon-to-be graduates from Mathematics or Engineering with a presentation on careers in Management Information Consulting. This will transpire on Monday, October 6, starting at six in the evening, in Needles Hall 3004. Dress is casual.



Bongai

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IF MUSIC BE THE FOOD OF LOVE, PLAY ON ...

Suppose an alien anthropologist—or anthro-apologist—were assigned the task of finding what makes humans tick. Examining captured specimens down to the last amino acid is not enough. What makes them go on living in a highly competitive and toxic environment? (Then our intrepid scientist, who in no way resembles the author, could go on to figure out how the interstellar stock market works or why his nephew doesn't have enough heads.)

The only research materials he has are radio signals, sixty or seventy years of them. Of what are they chiefly comprised? Love songs: songs about how glad you are in love, songs about missing someone you love, songs about missing someone you love who is far away and isn't coming back, etc. Soon he is in deep water, with decades of songs, each one a tangle of unknowable emotions.

Because so much meaning can be submerged in such tawdry artifacts, these meditations will base themselves (for I am not so much their source and creator as a vessel through which they flow) on not a few casual phrases from songs old and new, in the hope that their several creators created for a better reason than that the words merely sound good that way.

LOVE IS A MANY-SPLENDURED THING ...

Mornings are the worst, in my opinion. At that time of day you are at face value, not a penny more. You stumble out of bed, look in the mirror and quip, "You again, eh?" Is love any different? Yes, because when in love you no longer see yourself at face value. You are more than the thing in the mirror. You are half of something new, a creature that struggles to discover itself through a wondrous process that we give a tired, inadequate name to.

Its antithesis, loneliness, is a post-Nietzschean thing. The rustic shepherd had his flock, his dog, his pipe and his God. Modern loneliness transcends such bucolic notions because we are so aware of the great voids that bracket our lives: the non-existence before birth and the non-existence after death.

The splendour of love is the way we can for a time forget that we remember. We don't think about being alone because at each moment in our thoughts there are two voices, just as your voice is drifting through the thoughts of another. We find ourselves using certain phrases in conversation that could belong to either voice; we can no longer tell and we no longer care.

The Nobel Prize

If you were in Chemistry or Physics then you could aspire to winning a Nobel Prize. In math, however, even the most prestigious prize does not compare in public popularity with the Nobel Prizes.

Have you ever wondered why a Nobel Prize in Math was not created? I have done some investigation into this question and it seems likely that Mr. Nobel had nothing against math per se: it's just that he didn't think that it was worth of a prize (as hard as that may be to believe). However, this conclusion doesn't make for interesting reading, so I will include some rumours that I have heard. One unnamed person thinks that Nobel's wife ran off with a mathematician. While I can't blame her for falling for a mathie's natural grace, charm, charisma, and intelligence, I don't think this is a likely prospect: as far as I can tell, he was never married.

Another unnamed person believes that Alfred Nobel didn't like the person who would likely have received the math prize, I find this, too hard to believe in light of the mathie traits mentioned previously. If on the other hand, either of these stories is in fact correct, then the moral of this story (... and you thought I was just filling up white space) would be that if you don't want to ruin the chances of a famous math prize being created, make friends with wealthy industrialists and don't run off with their wives.

The Termal Schizo

Keep Parasites Out!

I was pleased to read J.T.MacIntosh's insightful letter on how to offend to the core (Imprint Sept. 19). In this letter, it was pointed out that many people are here because their ancestors immigrated, not to Canada, but to a harsh, cold wilderness. These pioneers performed gruelling labour and self-sacrifice, so their descendants are clearly entitled to lean back in their comfortable surroundings and enjoy the fruits of that labour.

On the other hand, the *real* immigrants, those who wish to come to Canada now, are not entitled to labour in a nation where they would have it too easy. These dregs of humanity contaminate our glorious land with their presence.

Our innate superiority is clear in the way that we put reason and integrity ahead of emotion in order to more objectively consider the immigration problem. We are now well aware that many of the newcomers bring with them attitudes including vicious prejudices.

The solution, it seems, is to go forth and convert the heathen before we are overrun. We must disseminate our lack of attitudes, prejudices, and emotions to the resource-rich Third World countries, and show them the inherent superiority of whites and Christianity. Perhaps we can convert all those coloured folk to white, and in the process raise nations from the resource-rich Third World countries. Of course, this will require gruelling labour and self-sacrifice, but some amongst us are ready to rise to the challenge.

I would like to begin by nominating J.T.MacIntosh as our first representative. I am already collecting a fund to pay for a one-way air-fare to the resource-rich Third World country of his choice, where he won't even need to start in a harsh, cold wilderness. Anybody who wishes to contribute to this fund is advised to contact me.

Cary

Robot Music Here

Skinny Puppy with Severed Heads hit Fed Hall last Wednesday. The event was not incredibly exciting or awesome. In fact, some might consider the event to be down there with the Jitters' concert or even the one-time, traditional English Pub (the one where 60 people showed up). To start the evening off wrong, a considerable amount of the opening dee-jay music was Dead Or Alive type music. [Who listens to that stuff anyway?]. Severed Heads started off the concert with their wall-of-electro-pop-funk. The singer wasn't too audible above the sound. They didn't actually do a lot of intense keyboard work, because of the apparent backup music. Overall, the performance was uninspiring as they tapped away at their machines to produce a massive beat-oriented sound [beat? what beat?].

After a short bit of very reserved slam-dancing, Skinny Puppy proceeded to perform. The opening act of symbolic birth was pretty catchy. The lead singer showed creative and new uses for red food colouring, McDonald's grease, mannequin faces, and broken mirrors. The video show was certainly interesting when it was showing the aircraft-carrier disasters. The use of two big barrels as drums were effective. However, the lead-singer was still mostly inaudible. Again, the performance was not particularly inspiring or innovative. The sum of their individual performances was a wall of electro-funk-dirge. Any resemblance to those four guys in black from Britain who did Bowie and T. Rex covers is totally superficial.

However, on a positive note, the organisers of the concert are realising their efforts to bring UW some alternate-type concerts. Even as you read, preparations are underway for D.O.A. at Level 21 in Kitchener. One can expect some energy from that concert. At any rate, I won't compare Wednesday's event to the Depeche Mode concert that my younger sister took me to at Kingswood. Now that was a boring concert.

Elf

ElseWhen

mathNEWS ten years ago

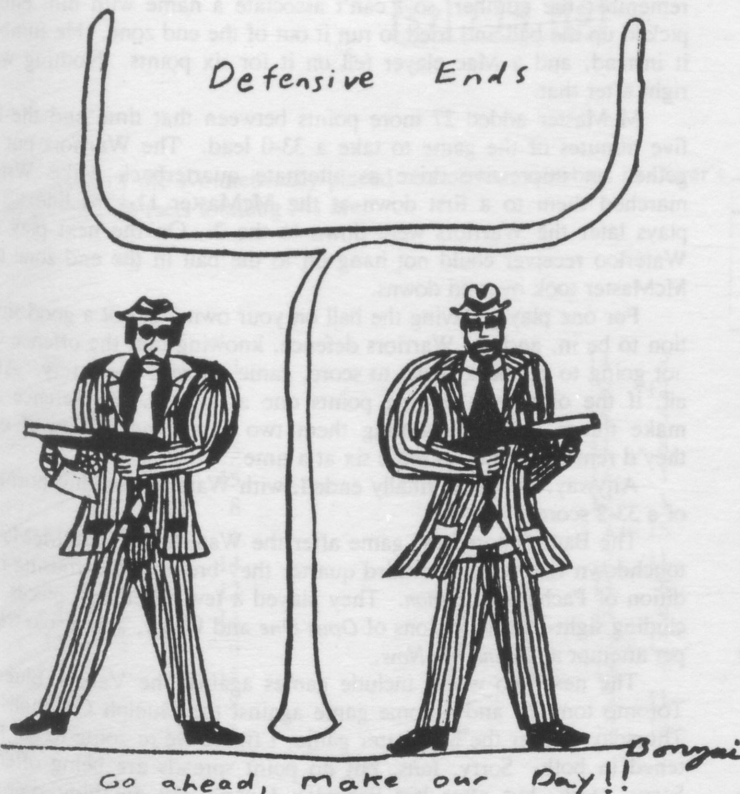
BIGGER AND BETTER—In 1976 the Faculty of Mathematics is the largest, in terms of full-time undergraduate students, in this university, with 2530 compared to 2356 for the next largest. Also to be noted is the average Grade 13 mark for the freshmen—81%.

CHEVRON LOCKED OUT—The Federation of Students' Executive sealed the offices of the chevron Friday following the resignation of the editor-in-chief and the Board of Publications Chairman. This was done in order to prevent possible trashing or occupation of the premises... On Thursday, September 30, Students' Council went through a 7-hour ordeal... The meeting ended with the chevron suspended from publication for 4 weeks... Throughout the meeting the pro-chevron faction heckled the councillors and the pro-Federation observers reciprocated.

FREE UNIX—Unix is currently in use for 6 classes, along with a number of non-course users. Currently, all one has to do to get a userid is ask for one... Unfortunately, with the heavy course use it has been getting lately, I think Unix will follow in the footsteps of TSS and become a cost-justified system.

WIDJET GROWS—Speaking of WIDJET, that system now has two processors to support its roughly 80 terminals. The new processor is a PDP-11/34, which I am told is a stripped-down version of an 11/40... It seems response on the system has improved. The main bottleneck remains in the link to the 360/75, which runs jobs in a fashion similar to DEBUG in the old days.

Excerpted from mathNEWS, Vol. 12, Nos. 2 and 3, October 1 and 8, 1976.



It is rumoured that we will get a partial (70%) solar eclipse here around 3:00 this afternoon. I don't yet know what the weather is today since I'm writing this Monday, but at any rate do not look at the sun while this is happening. Or at any other time, for that matter. This is how D.C.S. might have announced the eclipse, were they into that sort of thing...

Note to all users of the Sun

The Sun will be experiencing a slowdown this afternoon for some preventative maintenance and upgrades. We will be installing a more powerful air-conditioning system, so higher winds and cooler summers can be expected from now on. On the bright side, this new system is not liquid-cooled, so less rain is in the offing. If you have critical work to be done, please transfer your files to another nearby Sun. We've warned the operators at Alpha Centauri to expect a busier-than-usual day.

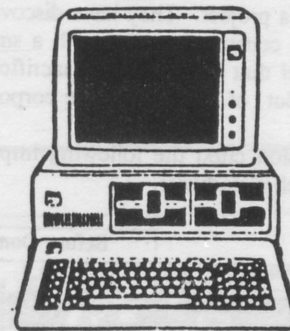
We will also be adding a vector processor so Mathies can do their algebra assignments while working on their tans. People have been complaining about the slow 8-minute response time between the Sun and here, so the I/O bandwidth will be increased noticeably, especially into the ultraviolet. We will not be held responsible for severe sunburn caused by users not heeding this warning.

In order to recoup the expenses incurred by this essential upgrade, a solar user fee will be implemented next term. By the time the Ontario Government rules it illegal, we should be all paid up.

Center of Gravity

Omega XT

IBM COMPATIBLE COMPUTERS



Omega XT \$949

256K RAM, 1 floppy drive, video card, keyboard and composite monitor.

Omega XT-Turbo \$1349

640K RAM, dual speed, 2 floppy drives, hi-res monochrome video, keyboard, parallel port and TTL monitor.

TTX Daisy Wheel Printer \$399

18 cps, Tractor and Friction, Serial and Parallel. Reg \$499.

Diskettes \$8.49

DS/DD, lifetime warranty, PKG of 10. Reg \$11.95.

Commodore 64 Software, 50% to 80% OFF.

Logic Age Data Systems
Old Post Office Building,
35 King St. N., Downtown Waterloo
888-6130

Rapid Feet Movements

Math Soccer (mod B)

R.F.M., the Math soccer team in Men's Competitive B-League, played its first game on Friday the 19th and lost 2-1 to Mission Impos-civil.

Outstanding player for R.F.M. was the goalkeeper, Shawn Matthews. Shawn made a few great saves to keep us in the game until late in the second half. Other fine performances were recorded by Wilson Kwan (defensively), Neil Morewood (midfield control), and Mike English (striker).

Down 1-0 in the first half, R.F.M. was awarded a direct free kick outside the opposing team's penalty area. Mike struck the ball cleanly through the legs of the keeper. The 'civils went ahead in the second half and held on despite several good chances for R.F.M.

Come out and support *your* team this term. Schedule posted outside C+D.

Jim Miller

Another Boring Dome Stadium Story

While watching the football game the other Saturday against Laurier, we came to the realization that something drastic had to be done to radically improve the play of our football team. We feel that both the play of the team and the enthusiasm of the fans would be improved immensely if it was in a controlled climate. In short, we need a domed stadium.

We have the results of a recent commission which studied the feasibility of such a project. They have discovered that MathSoc could finance the entire construction cost with a small fee increase of \$563 per term. We feel that this is a small sacrifice to improve athletic integrity at UW. But, of course, private corporate donations would be appreciated.

The commission cited the following improved records to display the benefits of such a stadium:

	Before Dome	After Dome
Seasonal Record	2-9-1	10-1-1
Average Points Per Game	10	42
Average Points Against	59	8
Concession Sales Per Person	\$2.25	\$9.80

(Based on a survey of 13 college domed stadiums in North America.)

Possible features of the proposed stadium (tentatively called the Palindome) include:

- A retractable bottom (to swallow potential opposing touchdowns)
- Diamond Vision screen (to show replays and assorted music videos)
- Adjustable goal posts which can rise and fall to help/prevent field goals
- Mute concessioners (no more Get yer giant hot dogs!)

Proposed sites for the Palindome include:

- Existing site of engineering buildings (this would also improve the image of the University)
- Village One
- Wilfrid Laurier University
- Columbia Lake

We welcome your comments and suggestions on the aforementioned proposal. Please send to *The Society for the Nullification of Offensive Trends*, care of mathNEWS.

Let it Roll

Defence Prevents Shutout

Yes, folks, football Waterloo style is back in fashion after last Saturday's game at McMaster. Of course, before that we lost to Laurier for the 17th straight time, but that loss was expected.

Two weeks ago the Warriors hosted the Golden Hawks in the Shinerama Bowl. About 2500 fans (more from Waterloo than Laurier—something which has not happened in recent history) showed up to watch a good, close first half. At the end of the first quarter the score was tied at 1-1, off a Laurier missed field goal and a Waterloo long punt. Laurier then scored a field goal, and Waterloo responded with a single off a 32-yard field goal attempt. From there it was all Laurier, first slowly and ending with a flurry of scoring.

The teams headed for the dressing room with Laurier leading 14-2. After the mascot sack at halftime the Hawks poured on the points to coast to a 38-2 victory.

The Band members hung their heads in shame after the attack on Laurier's mascot. As a result, their second half was not worth writing much about. Suffice it to say that it was used to determine what pieces they would work on in practice on the following Thursday. They did come up with two new verses for *Hail to the Warriors*, though:

*Hail to the Warriors,
Beat Laurier!
They offer mathematics,
But only for BA's!*

*Hail to the Warriors,
Playing the Hawks!
We might as well go home now—
They're going to clean our clocks!*

Last Saturday it was off to Hamilton for a game against the McMaster Marauders. Waterloo hasn't beaten Mac ever since I came here (a long, long time ago...), and there was a feeling of anticipation before the game.

Unfortunately, the feeling of anticipation disappeared in the first quarter.

McMaster had just missed a short field goal attempt with about 4 minutes to play in the first quarter. The Waterloo player (I don't remember the number, so I can't associate a name with him either) picked up the ball and tried to run it out of the end zone. He fumbled it instead, and a Mac player fell on it for six points. Nothing went right after that.

McMaster added 27 more points between that time and the last five minutes of the game to take a 33-0 lead. The Warriors put together an impressive drive as alternate quarterback Mike Wright marched them to a first down at the McMaster 11-yard line. Two plays later the Warriors were down to the 2. On the next play the Waterloo receiver could not hang on to the ball in the end zone and McMaster took over on downs.

For one play. Having the ball on your own 2 is not a good situation to be in, and the Warriors defence, knowing that the offence was not going to get back down to score, came up with the safety. After all, if the offence is scoring points one at a time, the defence can make things better by scoring them two at a time. (Now if only they'd remember how to score six at a time...)

Anyway, the game finally ended, with Waterloo on the short end of a 33-2 score.

The Band ignored the game after the Waterloo fumble/McMaster touchdown fiasco. In the third quarter they broke into a rousing rendition of Pachelbel's *Canon*. They played a few other neat pieces, including sight-read renditions of *Opus One* and *Windy*, and a solo trumpet attempt at *Gonna Fly Now*.

The next two weeks include games against the Varsity Blues in Toronto tonight, and a home game against the Guelph Gryphons on Thursday. After the McMaster game, I figure we're going to get flattened in both. Sorry, fans, but no point spreads are being offered. Sorry, team, but after last Saturday I can't say anything positive. You're going to have to show us how much better you are, not tell us (I know a nice varsity field lacrosse team that needs some money...)

dwar

Mathematical Puzzles

- Solutions to last week's puzzles.

- This week's puzzle:

The completed magic squares are as follows:

8	3	4
1	5	9
6	7	2

15	1	11
5	9	13
7	17	3

14	1	9
3	8	13
7	15	2

15	2	19
16	12	8
5	22	9

23	3	4	20
8	16	15	11
14	10	9	17
5	21	22	2

1	43	40	10
34	16	19	25
22	28	31	13
37	7	4	46

The following two problems are cryptographic multiplications. Each letter (A, B, C, D, E, F) represents a distinct digit, 0 through 9 (some digits are not used). Also, none of A, B, C, D, E, or F represent any digits that are given (e.g. 1, 3, and 8 in problem (i), and 0, 7 in problem (ii)).

i)

$$\begin{array}{r}
 \text{ABC} \\
 \text{DEF} \\
 \hline
 \text{CDD8} \\
 \text{3BDB} \\
 \text{1DB8} \\
 \hline
 \text{1EEDD8}
 \end{array}$$

ii)

$$\begin{array}{r}
 \text{ABC} \\
 \text{DEF} \\
 \hline
 \text{DEFF} \\
 \text{ABC} \\
 \text{E07D} \\
 \hline
 \text{EEF70F}
 \end{array}$$

-the Wizard of Id

Some of the symmetrically-placed sets of four numbers in Dürer's Magic Square (sets totalling 34) are:

16	13	4	1	3	8	14	9
3	2	15	14	5	9	8	12
10	11	6	7	2	12	15	5
16	3	10	5	2	13	11	8
9	6	4	15	7	12	14	1
9	4	13	8	16	5	12	1
16	3	14	1	2	13	4	15
3	10	7	14	6	15	2	11
5	10	7	12	9	6	11	8
5	3	12	14	2	8	15	9
16	3	9	6	2	13	7	12
5	10	1	15	11	8	14	1
3	10	1	8	16	5	2	11
9	15	12	1	9	4	7	14



GILBERT September 13 1985

"Thank God his Co-op Work Term finishes soon and he goes back to the University of Waterloo."

Saturday's Nautical Event

A nautical event by any other name is still called Boat Racing. And this is one of the many events included in The Engineering Weekend, which was held this weekend.

Boat racing, in case you don't know the phrase, is an event which includes neither boats nor water, even though participants usually get wet, often feel like they are floating, and occasionally feel sea-sick. Racing, however, is an integral part of this event, and the race is to quaff 8 oz. of malt beverage as quickly as possible, hopefully faster than the opposing team. There are 2 leagues, 1 male and 1 female, with about 30 male teams entering and 12 female teams.

In the past this event has been a predominantly Engineering-type event, as Engineers have organized and raced in it. But 9 terms ago, (that's 3 years for you non co-op, or frosh, type), the Engineering society, in a bid to breach the inter-faculty gap, phoned and asked MathSoc to enter a few teams. MathSoc accepted and at the last minute, (half an hour before the first race), assembled 3 teams, 2 male and 1 female.

Needless to say, many of the Mathies had never done anything even resembling boat racing, and did extremely well ... would you believe, fairly well ... how about, average ... okay, okay so we did BADLY. But because of the extra inter-faculty rivalry and the good feeling created by the aforementioned invitation, the Math teams enjoyed themselves and felt quite welcome, though the Engineers kept asking us what class we were in.

The invitations have been continuous since that date and the female team, the PINK FLAMINGOs, has raced in every boatracing event since. The male teams raced in a few and finally most of the core of the team graduated, with none volunteering, (or to be found), to replace them.

Since the first race, as was mentioned, the Pink Flamingos has been racing and has done very well, placing in the finals or semi-finals every race. (Just a little horn-tooting.) And we have enjoyed the events, meeting people and joining in friendly inter-faculty rivalry. Not to mention meeting cute Engineers!

Now for the results of this set of races:
THE PINK FLAMINGOs WON.

This time for the first time in a number of terms we had a male team racing in the boating racing events as well. It was great having 2 Math teams competing again. The TIE ONE ONs, many of whom have not raced in a team and definitely not together before, did very well. We would like to mention 4 of the 5 members of this team are frosh. We believe they will do even better during Engineering week.

As mentioned before, the PINK FLAMINGOs won the girls league. It was nice to know that we were racing as equals and not as token outsiders, as well as that the feeling of breaching the inter-faculty gap is still present in the Engineering society. As usual there were challenges to the winners, (we always challenge the winners too), and the second challenge was made by the Engineering All-stars who won the challenge.

We enjoyed the entire event, but we also heard that there were a few people who felt bad about us racing in an Engineering event, which they felt should be exclusively for Engineers. Also that with all of Math to choose from, how could we not get a winning team?

We would like to apologise if we caused that feeling, or any feeling of malcontentment between the 2 faculties.

Because of the setup of our faculty, and the lack of events such as boatracing, a lot of the faculty does not even know what boat racing is. This combined with the fact that we can't even force most of the girls we know to try the sport, leaves us in a position of having problems getting a team together. Our team now consists of people who have raced since we started, people who are available that particular night, and/or people, when asked if they can boat race, say I don't

know; I have never tried and are dragged out. Thus, our team is good only by luck of the draw. The total number of people around on the team, including those who have raced but never will ever, ever again, is a maximum of 8, for an entire faculty.

To us winning is enjoyable and to be savoured, but participating is most important.

We apologize if this article offends anyone or if we have caused a problem with the inter-faculty gap, which we believe has been narrowed. But we hope that the faculty gap can remain narrow.

How else can we race?

THE PINK FLAMINGOs

P.S. My roommate Dave says we should boatrace with milk.

C On The 'Bun

(words: C.Sneer; music: McCartney & Wings)
--from the forthcoming LIFE'S A BITCH lp, 'And Then You Die'

Stuck inside these white walls,
Looping round forever,
No one left to talk to
Alive again, like you, mama,
You, mama...

If I ever get out of here,
Thought of giving it all away
To a registered CS frosh.
All I need is a pint a day,
If I ever get out of here,
If we ever get out of here.

Well, the pain exploded with a mighty crash
As we logged onto the 'Bun.
And the first one said to the second one there:
I hope you're having fun!

CHORUS: C on the 'Bun, C on the 'Bun!
You look paler, man, said the failure, Sam.
I see you loop forevermore using
C on the 'Bun! C on the 'Bun!

Well, the grad consultant drew a heavy sigh,
Seeing no one else had come.
And a bell was ringing in the terminal room
For the students on the run.

CHORUS

Well, as night was falling in the sterile world,
It began to settle down.
And on-line they're searching for us everywhere,
But we never will be found.

C on the 'Bun! C on the 'Bun!
Well, the course's prof, who wasn't soft,
Can mark forevermore
Using C on the 'Bun! C on the 'Bun!

continued from page 2

Our next issue will come out next Friday, October 10. Not that this means that we're going weekly. Issue Four will be two weeks later. But then, Issue Five will be at some time which is unpredictable based on the pattern set by the first four.

Keep submitting those Prof Quotes. We'll publish as many of (what we arbitrarily consider to be) the best as we can. Also, other articles are invited. But the sooner the better. On the other hand, if you tell me you're going to write something, then I can save you space, and even remind you at some point, if you'd like.

Now, on to the thanks. And they are many. Some are to be thanked for writing, others for proofreading, cut-and-paste, and one for telling us (from home) what to order on our pizzas. Some are thanked by pseudonym, some by real name. Yet more were most helpful behind the scenes, by helping me get organised, and by formatting articles for me. Together they are responsible for making mathNEWS what it is.

The names of those so deserving of thanks include (in no particular order): Rob Harnden (he's the one to credit for the terrific covers we're seeing this term!), Dan Kermode, dan schnabel, Cary Timar, Frank Letniowski, W. Jim Jordan, Tom Ivey, Camille Goudeseune, Dave Mooney (in **BOLD CAPITALS** cause he wanted to be thanked that way, since he showed up with an arm in a cast, and stayed around and helped all evening), Lisa Seabrooke, Wilma van der Veen, Barb Palmer, Brett Martin, Rob Muir, Elf, John Omielan, "Just Wondering", Fred Walter, Bonzai, Ken Shirriff (sorry for spelling his name incorrectly last week), Steve Rapaport (happy now?), Kevin Mackay, Let It Roll, Jim Miller, Fozz, the Wizard of Id, Frank Grossman, Kerry Garnier, derfy, and a couple others whom I have forgotten. (I always do).

Happy Birthday to Steve, and Tom, and Janice, and ...

As so often is done, I invite new people to come on out and join mathNEWS. Just show up for a production night and at least eat some free pizza. This includes a certain person who left me a note that he was interested in joining mathNEWS, but whom I have been unable to contact by phone. I haven't seen him out yet, but hope that he will come. We also need more representation of the female perspective, as well as from math and other faculties.

I thank those who have taken the time to give us feedback, as little as we did receive. I got mail welcoming the return of Watman, and a half-dozen nominations for Integer of the Week. Unfortunately, this week has us doing a Mathematician of the Week. Guess what we're doing next week.

Oh yeah. This issue was, of course, put together on Monday evening. During a thunderstorm. A power flicker at around 11 in the evening interrupted us terribly. The last tapedown was done Tuesday evening. Just thought you'd like to know.

Paul D. Obeda

P.S. As I page through the articles in this issue, I notice that (for some reason) many of the quotation marks have been eaten. You can put them back in yourselves to stay awake in CS, if you'd like.

Maple Tutorials—TODAY

Tutorials to learn the basics of Maple will be given in MC 3007 at 9:30 and 10:30 THIS MORNING.

Maple is a computer language developed at Waterloo, to help students, professors, and researchers with *exact* mathematical computations. Maple can:

- Solve integrals exactly:

$$\int x^2 \cos(x) dx = x^2 \sin(x) + 2x \cos(x) - 2 \sin(x)$$

- Solve systems of equations with many unknowns:

$$\begin{aligned} x + 2y &= -1 \\ 2x - y &= 1 \end{aligned} \implies \begin{aligned} x &= 1/5 \\ y &= -3/5 \end{aligned}$$

- Manipulate matrices:

$$A = \begin{bmatrix} 1 & 2 \\ 2 & 3 \end{bmatrix} \implies \text{eigenvalues are } \begin{cases} 2 + 5^{1/2} \\ 2 - 5^{1/2} \end{cases}$$

and much more ...

Brought to you by the Maple group and the Applied Math Club.

SAC: How to Get Into It, What to Get Out of It

The Student Advisory Council to the Department of Co-operative Education and Career Services is a mechanism through which feedback and advice can be shared between co-op students and representatives of the Department. SAC hold open meetings every two weeks on Tuesdays at 4:30 pm, in the lounge in Needles Hall. Any students interested in participating in discussion on issues pertaining to our co-op system can attend the next meeting on Oct. 14th. If you wish to raise a specific issue you should contact a SAC rep beforehand to have it added to the agenda.

Your SAC Math reps include Brian Capstick, Elizabeth Dunn, and Nathalene Fong, and they can be contacted through Brian Capstick at the MathSoc office.

Good morning math-cadets. Our deep space listening post at Alpha Romeo has detected curious transmissions on certain subspace frequencies. These signals have been summarised and set out below as questions of indeterminate difficulty. (Note that problems of indeterminate relevance having nullspace origins may be readily obtained in any Mathematics 234a section.) Simply turn down the volume on your auto-prof, and examine

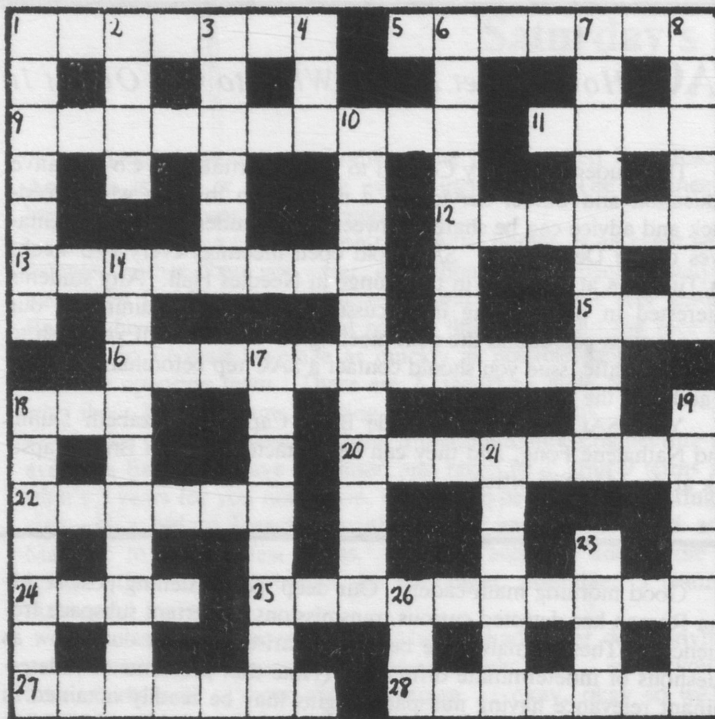
mathNEWSquiz #7

1. Name the butler on The Addams Family television series.
2. In which 1934 motion picture did Shirley Temple sing On the Good Ship Lollipop?
3. What was the name of the Cunard liner that was the first to arrive on the scene and escort survivors of the Titanic to New York City?
4. Which Canadian political figure said What's a million?
5. In Formula 1 auto racing, the machines of which team are, by tradition, red in colour?
6. In which year did the 97-metre long nuclear powered submarine USS Nautilus travel under the North Pole?
7. Which newspaper did Lord Thompson of Fleet purchase in 1966?
8. Who set the two-man stolen base record of 160 bags for the Montreal Expos in 1980?
9. Once upon a midnight dreary, while I pondered weak and weary
10. Marg Osbourne and Charlie Chamberlain were key elements of which famous Canadian entertainment troupe?

And now, for those who said It couldn't be done! (and those who merely thought of saying the same, but were inhibited by a somewhat limited vocabulary), the solutions to mathNEWSquiz # 6: Dopey doesn't speak in Snow White and the Seven Dwarfs . . . hence no one supplied his voice; the SS Edmund Fitzgerald sank during a storm on Lake Superior; Sam Spade knows Caspar Gutman to be the Fatmanask Joel Cairo . . .); Cat Ballou; thirty-three autos comprise the starting field of the Indianapolis 500; Larry Buster Crabbe: the Rock of Gibraltar and the Jebel Musa at the eastern end of the Strait of Gibraltar; Dinner-time, Astro!; Claude Debussy; and Billy Hands struck out fourteen times in a row as a batter (and who says the Cubs find talent hard to come by?).

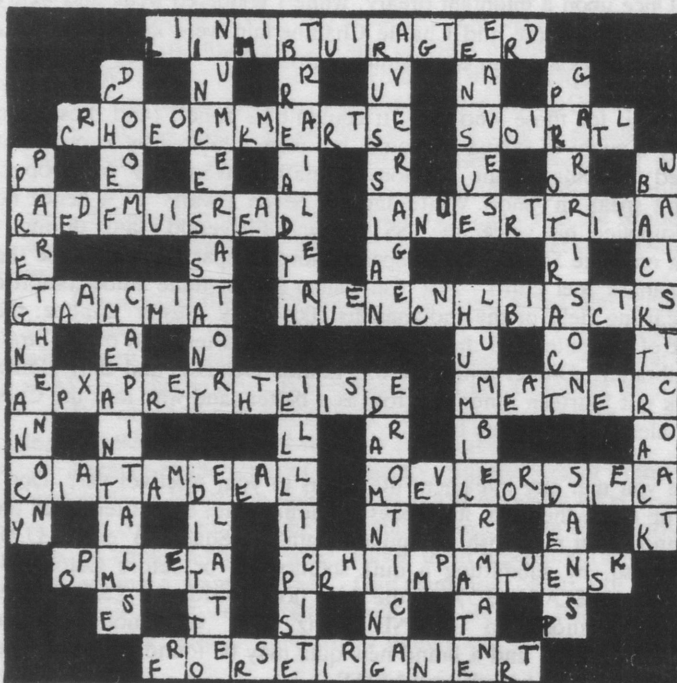
Have you met any intelligent life forms in your electives yet? Don't give up hope, there are still weeks remaining until end of term. In the meantime you may wish to emulate mathNEWSquiz #6 expert U.N. Owen Esq. by submitting a quiz solution on or before October 4, 1986, in the BLACK BOX on the third floor outside the C&D lounge. Correct solutions to mathNEWSquiz #7, yet another mathNEWSquizexpert, and a brand new quiz may be found in the upcoming issue of (your friend) mathNEWS.

the mathNEWSquizmaster



Conventional

- | | |
|--|---|
| Across | Down |
| 1. LOOKED SCORNFULLY | 1. COMPOSER |
| 5. OBTAIN | 2. THUS |
| 9. RULE | 3. DEPENDED |
| 11. DISTANT | 4. POINT |
| 12. MEETING PLACE | 6. DISBELIEF IN GOODNESS |
| 13. ERECT | 7. SMITTEN |
| 15. SUITABLE | 8. ZEALOUS |
| 16. ORDER | 10. INVENTIVENESS |
| 18. ANIMAL | 14. PILE UP |
| 20. CONTAINER FOR A CERTAIN BEVERAGE (2 wds) | 17. CARNAGE |
| 22. EXPRESSES MIRTH | 18. NOOSE HOLDER |
| 24. SPOKEN | 19. PERTAINING TO CONJUNCTION OF CELESTIAL BODIES |
| 25. PATRONISE | 21. TOOL |
| 27. THIN | 23. SELECTION |
| 28. SHELLED ANIMAL | 26. ALMOST DARK |



GRIDWORD

Cryptic

Across

1. Urge fee for certain immigrants (7)
5. Distributing is taking legal action (7)
9. Blocked golfer Dave with one hundred that faded faillessly (10)
11. And others come back dead (2,2)
12. A composer was a metre by the wizard's land drawing (6)
13. A beaming radio loses nothing beside a dance, much less (7)
15. Run-around vase? (3)
16. Arranged trees infect an unsided person (11)
18. Nothing as foolish leads a dolt (3)
20. Mediaeval hall attendance sighted in mythological heaven (8)
22. Sherry hesitates for the train attendant (6)
24. Started the bet back in a volcano (4)
25. Ready-armed to have my mind drift (3-7)
27. Three-way plate is European (7)
28. Soft, also gold with a bad-spirited box (7)

Down

1. A guy hesitates in by theft (7)
2. Midway sounding cost (4)
3. A dancing girl around his age? (6)
4. Greek arrival time? (3)
6. Men in risen tides leave settled material (8)
7. In a trolley with certain mountains within the school (10)
8. Elating rotation of solidifier (7)
10. Fed up with Yves' line arranged with protection (11)
14. Fenced fire may be an unsimilar quantity (10)
17. An acting game to burn fruit drinks (8)
18. The operating system pillages fish-hawks (7)
19. Prime study of accounting in the Mediterranean island (7)
21. In this, that guy gets the control of the horse (6)
23. Small bullets within Sam Moore (4)
26. Initially does it pay to briefly immerse? (3)

Who
Where
Comment

Comments of the GridSword

We now return you to another exciting episode of GridWord, that great mathNEWS double crossword contest. Only eight solutions were received from last issue. Do you realise that this past summer we averaged 22.2 solutions per issue? Come on now, show me you aren't wimps and get those solutions in! (this is your drill sergeant speaking) Choose which puzzle to do, complete the grid, and hand in your solution via the BLACK BOX situated across from the MC third floor lounges. Solutions must be received by Monday October 6, the year of our Lord 1986 to be eligible for nifty keen prizes (NOTE: this is the Monday coming up). If you aren't sure what to do, try to find a copy of last issue to compare clues with solutions.

This week's winners are: cryptic **Jill Fleischman** (chosen by the pseudo-random Alison number modulus matching selection method) and conventional **The Robsy Twins (Dan & Rog)**— who made the only conventional submission eligible for a prize). They may pick up their prizes by consulting (AKA bugging) the people in the MathSoc office, MC3038. Other correct solutions appeared from: Brad Debroni & Barb Palmer, Larry Knerr ('these years' is AD + MI (note) etc.), Sean D. Bishop & Dianne Turpin, Len Popp and The Chuckler. Single letter incorrect solutions were received from Cyril Chen & Jack Rehder.

Comments of the week: 'Why? Nothing else to do on a Friday morning' (does that mean GridWord is a last resort? I'm hurt!), 'It's good to see Frank doing GridWords ... and yes, we are his fans!' (I feel better now!), and 'He-he-he-he' (guess who?).

Viel Glück!

fletniowski

P.S. For anyone named Sam Moore, cryptic clue 23d is not intended to be taken personally.