Volume 59 Number 2



## Prez Sez

Wow. It's the first week of June and it already feels like autumn. Mother Nature sure has been showing her sense of humour recently with $30+$ degrees in some parts of the country, while it was snowing in others. But regardless of that, it is time for another update on the happenings of MathSoc.

Things have been going very smoothly so far this term, thanks to a great crew of volunteers that we have working in the Math Society office, either office working or holding a position. As far as I can tell, everything is pointing towards this being one of the most un-controversial terms in years.

There will be some flavoured coffees for sale June 15-18 in the C\&D, and if this new idea goes over well, then we will be getting them in permanently. If you happen to try one of these coffees during that time, we would ask that you please fill out a survey to indicate how you liked it.

What else is going on? Well, this weekend (June 4-6) is Waterloo Weekend. This is the time of year that alumni come back to visit their old haunts, and mingle with people from their class. This year is especially special as it is the 25th Anniversary of the Math Faculty and there are some special presentations being made to commemorate the birth of our home. If you happen to be working on a CS assignment, there will be a BBQ out on the Davis Centre Green from 11:00 until 2:30 on Saturday, so please come over and get some nourishment. As usual, this is a Charity BBQ.

I can't think of anything else that's happening, so this is EC signing off, until next time.

Eric Sutherland

## MGChair Speaks

Hi Y'all!! For those who don't know me, you're lucky. My name is Craig Parkins and I will be the MGC Chairman '93 due to the lack of anyone more appropriate. Seriously, however, with your help, I believe we can make this a very successful and enjoyable last year (fingers crossed) for all of us in the ' 93 graduating class.

Most people label the Math Grad Committee as a bunch of 4th year students selling pizza and organizing parties down at the Heuther Hotel, but it is much more than that. MGC is responsible for: creating the Faculty of Mathematics Yearbook from scratch (this is no small task!!), organizing the Math Grad Ball, co-ordinating Math Grad Photos, fundraising, and much, much, more!! In order to complete those tasks I need assistance. Anyone who is expecting to graduate in the Spring ' 93 is encouraged to participate. you can be a part of the MGC or be an MGC volunteer. The MGC office is MC 3029, so come on by and say hello.

Pizza Days are social events will begin in the very near future. Also, we are going to want lots of funny, weird, embarrassing, etc. pictures for next year's yearbook, so start bringing them in ASAP so we can start to make a good collection to choose from

Until next time. See ya.
The Craigster

## Soc Toc

...that Social thang

Howdy all! Wow, my first Soc Toc! If you would have told me I was going to be one of the two MathSoc Social Directors this summer, I would have said you were out of your tree! But you know what? It's fantastic! Have we ever got the rest of this term planned for you!

First off, I'd like to congratulate Eric Sutherland and Grant MacArthur on their victorious romp over everyone in the Bridge Tournament that was held on May $21^{\text {st }}$ (actually, it wasn't a romp, but I have to say something to make them feel good about their mostly-luck playing style). And the Blue Jay game on the $27^{\text {th }}$ was a stupendous success! Fun was had by all (especially a certain "blondie" that almost got his butt kicked out of there!).
But what do we have planned for you, you ask? Well! Let me tell you! The first thing to mention is Waterloo Weekend, which happens tomorrow. It's mostly for returning Alumni to party, so it really doesn't involve us directly (unless you want to count our humongous BBQ by the DC courtyard). June $12^{\text {th }}$ is Colour Day. Wear the most of a certain colour and win a prise - what the colour will be is still a mystery at this point, but I know it won't be pink (sorry Monica). The big event is the Math Faculty's $25^{\text {th }}$ Anniversary Semi-Formal Dinner on June $19^{\text {th }}$ at Fed Hall. Tickets are available at MathSoc - $\$ 10$ each for students and $\$ 20$ each for faculty members. This dinner will be followed by a $25^{\text {th }}$ Anniversary Theme Pub. So whether you go to the dinner or not, it's still a great night to party!

Our Euchre Tournament is scheduled for June $25^{\text {th }}$, and our Car Rally is scheduled for July $12^{\text {th }}$. Details about entering these two events are forthcoming.

July $1^{\text {st }}$ is Canada Day! As part of the Canada Day Steering Committee, we're asking that if you would like to volunteer to help out on Canada Day to please get in contact with myself or Pat Callitri at MathSoc so we can forward your name to the right people. You get a free $t$-shirt for volunteering, and it's really fun, so try it - you'll have a great time!

We've got a Canada's Wonderland trip scheduled for July $10^{\text {th }}$. Tickets are on sale now in MathSoc - $\$ 20$ for Math students, $\$ 22$ for Non-math. This price includes entrance into the park, and the bus-ride there and back. A bargain of a price, certainly! And seeing as how successful our last Blue Jays trip was, we're planning another one for some unspecified date in July. More information to be forthcoming.
And one more thing: support the MathSoc BBQ's that we put on every other week in front of the steps of the MC. All profits and proceeds go to charity, the first of which is the Cancer Research Society. You're not just supporting MathSoc, you're supporting your community.
That looks to be about it for now, so until next issue, we're -
Curtis Desjardins
Pat Callitri
MathSoc Social Directors

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Editor: Betty-Jo Hill and Christina Caldarelli

## PMC\&OC Weekend Update

## I'm glad I'm not Dennis Miller, stuck doing stupid Shredded Wheat commercials

Hello hello hello! It's been a while...but now we're back! As reported in our last column, we indeed have held elections! And now, exclusive to mathNEWS, we'd like to present... Our Summer Executive!!!!

President : Wayne Liu (outfielder and volleyball hero) Vice President : Steve Gamble (all-star second baseman) Secretary/Treasurer : Kevin Takahashi (first baseman)
So far we have had two fabulous talks! Kathryn Hare gave us the lowdown on graduate studies in math, and Jonathan Borwein gave us the lowdown on Pi! Both talks were interesting and informative and we'd like to thank Profs. Hare and Borwein for giving them. We're still undecided about having a talk for next week (June 8-12), but look forward to Prof. William Gilbert's talk about fractals, June 17! Keep your eyes peeled for posters about upcoming talks!!!
On to other matters... by the time you read this our co-rec slo-pitch team, Ptak's Pterodactyls (formerly Tak's Tigers), is hopefully still undefeated! But these co-rec games mean nothing to us, as we train hard for the ultimate showdown: softball vs. the profs! We've lost the game two summers straight, but this year WE'RE READY! And, of course, the inter-club softball weekend/day/whatever, wherein we'll crush, err. . . enjoy playing against the other clubs! And then there's our co-rec volleyball team, the Wet Willies, a bunch of pure mathies and C\&O types in search of the perfect spike! Aided by some tall people, some good players, and a little Stealth(TM) technology, we've haven't been able to make fools of ourselves......... YET!
As far as administrative matters go, since we're a student chapter of the Mathematical Association Of America, we can offer MAA memberships at a discount! Come on by the office, MC 3033, for further details. As a matter of fact, just come on by the office! Official office hours are at least from 11:30-1:30 MWF, 11:30-2:30TR - but you're likely find people who can help you most of the day. So drop in, whether it be to join the club, just say hi, or to ask advice on thing mathematical, musical or cinematic! We've also got lots of other really cool things planned for the summer including BBQs, perhaps a movie excursion or two, and the mother of all movie marathons - a 72 -hour straight movie weekend! (run by yours truly, natch.)

Well, I'd include more, but I seem to be running out of time. And so ends another PMC\&OC column....until the next issue of mathNEWS...
Be seeing you.
Kevin "Tak" Takahashi PMC\&OC Secretary/Treasurer/First Baseman/Movie Fanatic

## Waterloo Weekend Keynote Speaker

Professor Fred Hofstetter will be speaking on Saturday, June 6 at 2 p.m. about multimedia software. MOST people would have to pay to see this excellent example of amazing talking but YOU, the students of Waterloo, can get free tickets. If you think you'd like to hear about this revolutionary new hypermedia web, talk to Janet in DC 2353 before she leaves on Friday.

## CSC Flash

Many events are on the distant horizon. Unfortunately, I cannot relate the specifics, loyal readers, because most are internal CSC secrets. However, for a measly two dollars, you too can become a True CSC Member and be privy to these juicy secrets. In the meantime, some general information:

In the next few weeks, we expect to have a number of talks. Much is still classified information. However, I can relate to you that we're having Prabhakar Ragde near the end of June. Look for posters sometime soon.

The ACM Programming Contest is fast approaching. Meeting dates are currently classified, however you might be able to get the inside scoop by talking to Ed Dengler. Prizes are still likely, but details, again, are confidential.
The CSC will be (tentatively) holding a T-Shirt design contest. True Members who remember the fall term T-Shirt fiasco can rest assured that no compromises in quality or quantity will be made. Drop off any entries to the CSC some time. Exact contest details are still classified information, but you may wish to talk to the CSC Secretary.

I should note now that CSC Executive meetings, open to all True Members, happen once a week and are excellent places to find out much of the previously mentioned information.
Thank you for your time. I'm now off to a classified destination for unspecified reasons.

Calum T. Dalek

## GINO'S PIZZA



University Shop Plaza
747-9888
160 University Avenue, W.
OPEN 24 HOURS • FREE DELIVERY

valid only at this location - not valid with any other offer plus applicable sales tax

## Bar-B-Ques Bashed By Bullish Bureaucrats

I heard a rumour last week that disturbed me greatly. This was that the government of Canada was trying to cut out barbeques on campuses across Canada. To do this they were going to implement a lot of changes to the way things are presently run to make it virtually impossible for student-run events like barbeques to exist.
This really makes me burn. For students in Canada and around the world, a summertime BBQ can be one of the most enjoyable things to have on a hot afternoon. It raises money for either projects designed for students, or for a variety of charities. I believe in our case in the Math Faculty, we give the profits from each BBQ to a charity of the students' choice. The gesture of giving to a worthwhile charity is really wonderful and should not be squashed as the guys on Parliament Hill are trying to do.
The restrictions that they put on any further BBQ's are: 1) The site of the BBQ must have both hot and cold running water; 2) the utensils must be washed regularly, and there must be different utensils for raw food than for cooked food; 3) you cannot have the event under a tree, or near any foliage; 4) the propane tanks must be 'far away' from the grills.

Some of these are understandable, but getting hot and cold running water, outside, is not an easy feat to accomplish. And any of you that own a propane BBQ know that the hose from the grill to the tank would not be classified by any person as being far away. It was obvious to me when I first heard all this that the government was trying to crack down on something, but they were making the regulations too strict.

Fortunately, some loopholes have been found. The tanks will be as far away as possible from the heat and from people. Two coolers will be purchased, one for hot water, one for cold, both with spouts from the bottom to provide 'running water'. The other changes are already in effect.

I sincerely hope that this will suffice to meet these new laws, but it still saddens me that people that we have elected into power are so obviously neglecting the needs of society.

## Album Review

With A Picture In Mind<br>Lava Hay Nettwerk/Capitol

Can you remember a folk duo comprising of two long-haired blonde babes who looked like they were twins but were merely friends? They brought us videos for songs like "Baby," "Won't Matter," and "Waiting For An Answer." As a promising new Canadian act, their self-titled debut album made its mark in 1990.

Lava Hay is back with a new album and, without doubt, I believe this one will deliver them more success. The acoustic, part folk, part country music is rich in sound. Lyrically, it is similar to the previous album; the messages are simple and objective, without the interference of personal references. As well, it is removed from heavy emotions.
Currently the single, "Don't Tell Me," is on single release. On the album, this track melds smoothly into "Listen Well," a peaceful song with the beautiful piano accompaniment of Bob Wiseman. Other songs which may be released as singles are "Here And Nowhere," and "Lost You."
Lava Hay will be the opening act to The Grapes of Wrath at a concert in Toronto in the near future.

## Mathie Course Selection Guide

Can't think of any fun electives to take? Want to know which courses are good, bad, or indifferent to students? Well check out this list which we at mathNEWS have compiled. Remember, pre-registration for next term is in a couple of weeks.

PHIL 140: Main course content: if $A-i B$ and $B-i C$ then $A-i C$.
This is a course in basic logic. It is so easy that mathies should not be allowed to take it. You should though, before they get smart and make it an anti-requisite to PMATH 330 (another bird as PMATH courses go). This course gets 4 birds on the easy scale.

MUSIC 101, 102, 201, 203, 301, 302: Main course content: Choir singing.
If you like to sing then this is the course for you. Just show up to the required practices and concerts and claim your $1 / 4$ credit. You do have to audition, however, but there is no homework and the course is essentially pass/fail (easy to pass, hard to fail). This one gets 2 birds and 2 whole notes on the interesting/fun scale.

C\&O 230: Main course content: Generating functions from hell. Graph theory from hell.
This course is (unfortunately) not an elective for most mathies. But if it is, don't take it! If you have to take it, don't try to put it off. You might fail it the first time so don't leave it until 4 B . This course gets 4 skull and crossbones on the hard scale.

MTHEL 100: Main course content: Business law for math students.
Listen to Mr. Lawrence tell humourous stories. He really is funny ... winner of the Distinguished Teacher Award. All tests are multiple choice and taken right out of the text. This one gets 3 birds on the easy scale.

ECON 101/102: Main course content: Micro and Macro Economics (respectively).
These courses should be taken by everyone. Learn to predict the next recession so you can take advantage of the misfortune of others. If Larry Smith is lecturing make sure you get into his section. These courses get 2 skull and crossbones.

SCI 205: Main course content: High Fidelity Sound Reproduction.
If there was ever a practical course at Waterloo this is it. Learn how to separate the good stereo equipment from the bad. Then you can safely blow all your money on a kick-ass window breaking system. All test questions are easy multiple choice and Phil Eastman usually teaches the course. This one gets 2 birds.

CS 452: Main course content: Real Time Programming on the bare metal.
Write your very own real time kernel in 80186 assembly and C code. Then spend every waking minute madly cranking out applications to run on top of it. This is a "code or die" course, not for the faint of heart but great for those REAL programmers out there. This beast gets 4 skull and crossbones.

EvilCoop
ShaggyDA

## Hot and Bothered

## Men and Women, Sex and Love in the 90s

Wow. Somewhere out there, in the real world, there is a publisher who actually thinks that mathNEWSis a serious publication. I know because they sent us a free copy of Wendy Dennis's new book Hot and Bothered for us to review!

Since I didn't have to pay for it and since I'll read just about anything, I decided to give the book a try. I was, however, tempted to wrap the thing in brown paper before taking it out in public, an attitude which I felt was justified since the first three people who saw me with the book said, "You didn't actually BUY that did you?" Oddly enough, though, the next comment was always, "Hey, um, can I borrow that when you're done?"

Yes, it's true. We are all interested in sex. And although some people seem more interested in actually doing it than in talking about it, according to Ms. Dennis, they are in the minority. In fact, she believes that, "we've arrived at the point where talking about sex seems to have replaced actually having sex as our favourite national pastime." Unfortunately, it seems that we're talking to the wrong people. Sure, we'll talk about sex in the locker room and on the girl's night out, but when it comes to talking to our Significant Others, says Ms. Dennis, we develop a sudden case of laryngitis. Therefore, she has taken it upon herself to tell us all the things that our lovers either assumed we knew or else didn't want to tell us.

Hot and Bothered is based on hundreds of (very) personal interviews, and it discusses everything from blind dates to the etiquette of extramarital affairs. The book is full of blunt language, deliberately provocative comments (do we really need to know the technique for a "politically correct blowjob"?), and colorful anecdotes. Ms. Dennis's "insights" range from painfully obvious (which she herself admits) to occasionally original. Among the obvious comments is her statement that if a man says he's going to call, he should. Slightly more unusual is her assertion that no one flirts anymore because men are afraid of appearing sexist while women are worried about seeming aggressive, so no one will start anything. While these comments are occasionally intriguing, there is nothing terribly earth-shattering about any of them; they would not be enough to make the book worth reading. Fortunately, however, Hot and Bothered has one saving grace: it's hilarious.
From her cynical description of "love brokers" (who charge up to $\$ 100$ per hour to enlighten people about the opposite sex) to her comments about men who talk about their penises in the third person ("He's tired now"), Wendy Dennis brings a decidedly irreverent viewpoint to the subject of sex in the 90 's. Her anecdotes are often highly amusing, and even occasionally enlightening. So if you're looking for a book that will help you improve your sex life and bring peace to the world, this one isn't going to help you. On the other hand, if you're looking for a few hours of entertainment, Hot and Bothered might be just what you want. And if you don't feel like actually buying it, maybe you could borrow it from me - the waiting list is only nine people long.

The Shaggy D.A.

## Deep Thoughts

I played the lottery last week and won a free ticket. Is it just me , or is that a little like digging for gold and finding a shovel?

## Masthead

Well, here I am rewriting the MastHead at 10:30 on Tuesday morning. Almost twelve hours ago, an optimistic masthead was written. However, our friendly neighbourhood printer decided to go down last night before giving us as much as one page of output. Thanks to Marion at Graphics Services, even with such setbacks we can get mathNEWS out on Friday.
Anyway, here's the list of the production night slaves and pissa munchers along with the problem that will take them 25 years to solve: Jason Payne (The first 25 years of my life); Peter Milley (What to wear on Jan 1, 2017); Dana Gougeon (Why am I here?); Bill McEachern (Why 42?); Mala Krishnan (Why?); Chris Beauregard (That Cadbury thing...); Chris Reuter (The script for Aliens 4 - The Musical (with Julie Andrews)); Fussy (How to break my 25 hour lease); Rob Zacchigna (Why do women go to the bathroom in groups?); Mike Hammond (Deciding what problem will take me 25 years to solve - Wait a minute! Nevermind.); Phil Rittenhouse (Choosing a career); Rob del Mundo (Lyrics to REM's "It's The End Of The World As We Know It"); Curtis Desjardins (Those crasy, kooky beings we call women (Okay, maybe it'll take more than 25 years)); Adam Benjamin (Does it really matter if the toilet seat is left up or down?); Ec Sutherland (What I'm doing at university); B Craford (Cover); Brian Spencer (How to rid the world of murderers, vandals, and Atari users); Dale Wick (What the 25 worst math problems are); and Jill Arnott (Why I'm signing this).
Betty-Jo Hill (Why I'm taking so many courses in university) Christina Caldarelli (I don't know - give me 25 years to think about it)

## Thinking about graduate school?

The Faculty of Mathematics is holding an Information Meeting on graduate work in the mathematical sciences:

Thursday, June 25, 1992 3:30 p.m. - MC 4061
*Why undertake a graduate program?

* How do you know if you are suited for graduate work?
* Where can you obtain information on programs?
*What financial assistance is available?

Departmental representatives from Applied Mathematics, Combinatorics and Optimization, Computer Science, Pure Mathematics, and Statistics \& Actuarial Science will be available with specific information about their programs.

All students welcome Refreshments available

## PROF QUOTES

Here they are, the best of this week's Prof quotes. What would classes be like without those wild and wacky and just plain crasy professors of ours. Please submit all prof quotes to the Black Box on the 3rd floor of the MC Building, just outside the comfy lounge. (I know you Mathies can find it, even Engineers canwell, maybe).
"It's not something you do in public, but in the privacy of your own room."

Dickey, PMATH 334
"Please forgive me for doing this in public."
Dickey, PMATH 334
"Pure mathematicians never lie, because we are PURE!"
Moskal, MATH 235
"In order to prove this, I'd have to define a lot of high level algebra which I know you don't want since this is supposed to be a Mickey Mouse course."

Moskal, PMATH 330
"In Calculus, we're always dealing with infinities. It's bordering on theology-and we DON'T want to offend the Analysis Gods."

Baker, MATH 148
"I realize that we have more theorems in this class than some courses in the entire year!!"

Molter, MATH 146
"This is what you use on exams when you don't have time for the real way!"

Becker, CS 241
"Infinity is determinate-bloody large!"
Lipshitz, MATH 138
"A very interesting idea which, by the way, I don't really know how to resolve."

Fasick, SOC 101
"One of the reasons I became a philosopher was because I wasn't good at anything!"

Pullman, STV 100
"I tell them what to eat, how much to eat, what clothes to wearthey're only 20 years old, after all."

Pullman, STV 100
"So you have this function, or this function... whichever turns you on."

Froese, MATH 137
"I'm a complete failure. I should have become a truck driver. You just drive along and every once in a while stop for a coffee. And at night, a hooker comes along."
"Another definition, followed by another theorem, followed by another definition. If you're lucky, you'll get two theorems for every definition."

Marston Conder, PMATH 344
"Does everyone buy that? Or are you going to at least rent it?"
Wagner, MATH 136
"I teach in 3 different rooms on the 4th floor, so the way I find the right room is to look for the one without a prof."

Li, CS 340
"You can all chat a bit if you like, I'll think you're dead otherwise."

Lewis, C\&O 350
"Go home tonight and pound your head with a hammer 'til that definition disappears!!"

MacKay, STATS 230
"You see that word [Gauss]. Whenever you see that word, you must bow."

McKiernan, AM 333

## COME ONE COME ALL!

Here's your chance to warn the ' 92 frosh of the perils and hazards that you yourself face(d) not so long ago as undergrad (or are currently facing now as midterms start to creep in)!

I am still accepting contributions for the 1992 Frosh issue of mathNEWS. The production day for the issue is Saturday June 27 th, (and may continue on to the 28 th).

By the way, for you NS and OR majors out there, I could really use a hand in telling the forthcoming frosh what to expect should they decide to go your route. All I'm looking for is a short blurb of about 250 words that describes your program.

All contributors for the ' 92 Frosh Issue will be rewarded with two free copies of the issue, free pizza on the production day, and immortalization in the contribution list (show off to those frosh from your old high school!).

Hope to see you out there!
Rob Del Mundo
mathNEWS Frosh Issue Editor
Summer '92

## Ultra Classifieds

To All and Sundry:
I've been in my head. I apologize.
The Bar One
Hey GL, careful how and when you do your laundry... Barbie doesn't need any more doll clothes.

## SayWat?

After last term's fiasco with the renaming of the Math and Computer Science building, University officials have decided to study a campus-wide name change campaign. The job of standardizing $U$ of $W$ names has been given over to an ad-hoc committee titled SayWat?
"The goal of SayWat?," says committee head Jonathon Smith, "is to present a standardized front to the public." It seems that that front is being maintained by the traditional prefix 'wat' at the beginning of as many high-profile campus names as possible.
Some suggestions of the commitee:

- Renaming the Campus Police to WatCops.
- The Campus Centre would become either WatPlace or WatCentre.
- The Federation of Students would be changed to WatFeds.


## Some areas of conflict:

- One committee member suggested that the position of University President be changed to WatBoss.
- Some difficulty has been found with the position of Ombudsman. The current suggestion of WatBuds will probably not pass.
- It seems the suggestion that the Village cafeterias be renamed WatJoint is not being taken seriously.
In reaction to the SayWat? committee, MathSoc President Eric Sutherland has formed a MathWord committee charged with the job of spreading the prefix 'Math' throughout the Faculty of Mathematics. Said Sutherland, "It seemed like a good idea at the time."
It is predicted that EngSoc will follow with this move, although the EngSoc executive was available for comment.
Student reaction has been mixed, with comments ranging from "WatTheHell" to "WatHuh?"

Suicidal Frosh

## Hug a Parsnip Today

I have had enough of all the petty bickering in this world. It seems like everywhere that I turn people are going at each others' throat in order to make the other person look bad. What is the reason for this? Are we a naturally violent species that needs to hurt one another in order to feel good?

Well, let me tell you. My best friend is a vegetable. A parsnip to be precise. The reason for this is that they don't talk back, they don't try to pick up your dates, and when you are hungry, you can have a nice snack, and it won't hurt their feelings.
This got me to thinking. Why don't we all just forget about talking with each other, and just become friends with our fruits and vegetables. It would solve any wars if we had a lettuce for a military advisor. The famine in Ethiopis would not exist, as long as everyone had at least one friend left. And football players wouldn't feel left out, as they wouldn't have a lower IQ than everyone they knew.

All in all, I think it is clear that this is the way of the future. After all, we are what we eat.

I'm Andy Rooney

## A Letter Writing Aid for your Co-op SO

This is a letter composed for your significant other to write back to you even though (s)he is too busy with work. Be sure to enclose a SASE with your letter to your loved one.

Dear (Jerk, Babe, Hunk, Your name, Elvis look-alike)
I am having a great time at my summer job! Every day I wake up at 7:00 and (shave my legs, put in my nose ring, think of you, brush my teeth, put on my toupee). Then, I go downstairs and eat breakfast. This morning, I ate some (Chocolate Frosted Sugar Bombs, crumbs, leftover pizza, stale bread, liver), with a glass of (blood, grapefruit juice, Elmira water, tea).
Anyway, I get to work, and I have a really boring morning, but you'll never guess what happened on my lunch break. I was walking by an alley, when all of a sudden, (a 10 -legged being from Mars, Don Johnson, the Devil, Santa Claus, a burglar) jumped in front of me. He (stripped off all his clothes, asked for all my money, wanted to see my leader, gave me a kiss, fell to his knees) right there in broad daylight. Naturally, I (gave him a piece of my mind, shot him with my revolver, kicked him between his legs, jumped him right there, ran away), and that was that.

So how have you been? I'm sorry I haven't written you, but I have been too busy (riding horses, catching thieves, breaking computers with a mighty swing of an axe, sleeping with my supervisor, sleeping). I hope you understand.

Write to me soon,
(All my love, Sincerely, I hope you rot, Yours truly, Forever yours)
(their name, Beelzebub, The Stud, Me, Your true love)
EC

## Why the Chicken Crossed the Road: The Solution

Twenty-five years ago, when this faculty was first created, each department was given the same problem, to see what solution they would come up with. Now, on the eve of the reunion of the students from that class, we are going to look at how each department has done.

The Problem: Why did the chicken cross the road?
The Solutions:
Accounting: have not as yet solved the problem, but they have worked out how much is will cost in order to solve it, and how long it will take to pay it off at current interest rates.
Actuarial Science: have assessed the risk of the chicken crossing the road.

Applied Math: They built a mathematical model with 3896 023 implicit functions, and are at present running simulations to determine the likelihood that the chicken is still alive.
Combinatorics and Optimization: All they have proved is that there is no optimal solution.
Computer Science: constructed real-time experiments, but the chicken got hit by a train.
Pure Math: have a solution for Cornelius the Corn Flake Chicken, but cannot extrapolate for all chickens.
Statistics: has tried each solution a statistically significant number of times to obtain the solution of best fit.
Teaching Option: presented the problem as an exercise for their students.

## Star Trek: The Next Logic Puzzle

Data Unleashed

While on a mission to deliver several kilotons of potassium to the water planet Agua IX (Starfleet has taken lately to performing practical jokes on some of the stuffier cultures in the Federation), the Enterprise was suddenly thrown into chaos. An error occurred in Data's stack procedure, and his behaviour control procedure crashed. Without his semi-Asimovian constraints holding him back, Data went on a homicidal rampage through the ship, slaughtering the following crew members: Captain Jean-Luc Picard, Commander Wil Riker, Lieutenant Worf, Counsellor Deanna Troi, Doctor Beverly Crusher, LieutenantCommander Geordi LaForge, and Ensign Wesley Crusher. Needless to say, Starfleet wants a report of what happened-and quickly, while there's still time to sell the movie rights to Paramount. Your job, of course, is to find out exactly what transpired.

Unfortunately, Data used the transporter to dispose of the bodies by beaming them to the centre of the nearest star (can you say PLOT DEVICE??), but the following clues should be sufficient to piece the mystery together.

1. Data used a different weapon on each of his victims, and no two murders occurred in the same place. He killed his victims by mutilating, severing, or surgically removing one of their body parts, and no two victims lost the same body part.
2. Either a medical laser or an axe was used to remove someone's arm.
3. Soon after the rampage, there was a momentary bout of chaos on the bridge. Ensign Smith sounded the alarm because he thought that a membranous, globlike alien life form was attacking the ship. It turned out that the "creature" was someone's spleen, which Data had smeared onto the main viewscreen.
4. After the savage attack against him on the holodeck, Riker tried using the computer's matter manipulation capabilities to recover the pair of body parts he had lost, but it was to no avail.
5. Worf's uniform was undamaged (except for a few blood spots, and those washed out) even though he was wearing it for the duration of the attack.
6. In his dying gasps, Captain Picard revealed his dry French wit by quipping: "It was a costly malfunction. In fact, my Chief Engineer and I lost an arm and a leg! Ha ha ha ack..." He didn't specify, however, who lost the arm and who lost the leg.
7. Data decided the technique he used to remove the testicles of one of his victims was rather effective, despite the primitive technology he employed for the task.
8. A quantity of black hair was found on the floor in Engineering near a neatly excised brain. Evidently Data had to shave his victim's head to perform the difficult brain-ectomy procedure.
9. In order to test his karate program, Data decided to use only his bare hands on the person he killed in sickbay.
10. There were a number of interesting coincidences: Firstly, no crew member died at his or her regular duty station. Secondly, no one wearing a red uniform lost an internal organ. Finally, energy devices were used exclusively on the female victims.
11. Although Guinan does not condone violence, she really thought that the atmosphere in Ten-Forward was improved by the chainsaw covered in human blood that was left wedged in the bar.
12. Data used a phaser, but unfortunately he didn't use it on Counsellor Troi.
13. When Wesley saw Data heading at him with a power sander, he ran for the transporter room, but in his panic he was unable to figure out the controls. He managed to beam most of Deck 17 out into space before Data arrived and took him down.
14. Data used a length of optic cable to sever both ears of one of his victims, marking a new pinnacle in deviant ingenuity.
15. When he was mutilating Geordi, Data had to make several modifications to his surgery algorithm to compensate for the limited space in the turbolift.
16. Data did not use the power sander when performing the nose mutilation. . .but it would have been really funny if he had.

Now that you've read the clues, your task should be clear. Find out which crew members lost which body parts, where they were attacked, and what weapon was used in each case. Solutions will be accepted in the BLACK BOX before $6: 30$ on Monday June 22. The most entertaining correct solution will receive the traditional prize. And please hurry-the fate of the Federation is in your hands!

Interesting final bit of trivia: One of the documents in Dr. Noonian Soong's will was a written apology to Starfleet for having implemented Data with a UNIX operating system. He claimed that he was hopelessly drunk when he put it in, and that it seemed like a good idea at the time.

Inkling and EigenGuy

## The mathNEWS Guide to writing your resume

Obviously, the most important thing your resume should do is convince the employer that you are the best qualified person for the job. The key, therefore, is to lie or, as we prefer, creatively exaggerate.

We learn in our co-op course that the typical employer spends less than 1 minute reading your resume. Consequently, he or she can't possibly have time to verify any of the claims in your resume. So, as the co-op reference manual says, "Don't be shy!".

When writing about about your experience use point form and impressive action verbs and modifiers such as: single handedly, tripled profits, heroically, corrected potentially fatal flaw, completely redesigned, invented, discovered, expertly, mastered, foiled corporate raid, brilliantly, decisively, ...

A sample resume is printed on the opposite page. Good Luck!
MacGyver

## Sir General Dr. Ima J. Mathie III Esq.

1B Mathematics<br>90054450

Present Address
300 Queen St.
Waterloo, Ontario
N2K 4C1
(519) 889-6385

Home Address
Buckingham Palace
London, England F23D34
0114481 592-489

## SPECIAL SKILLS

- Expert BASIC, Pascal, Ada, Lisp, Prolog, C, C++, D, Fortran, Occam programmer
- Redesigned Apple Macintosh, Sun, Vax, Cray, HAL 9000, M5 multitronic unit, Deep Thought
- Fluent in Russian, Japanese, Croatian-Serbian, American, Canadian, Australian, British, New Zealandish, Kuwaiti, French, Esperanto, German, Swahili


## WORK EXPERIENCE

- Microsoft Windows 3.1 developer
- Hubble Space Telescope Mirror Grinding Technician
- Porche test car driver

EDUCATION University of Waterloo, Waterioo, Ontario
Present - Candidate for Triple Major Honours Bachelor of Mathematics in Computer Science with Electrical Engineering electives and Pre-Med and Fine Arts

- Electives in Chemistry, Physics, Psychology, Music, Architecture, Biology and Philosophy

1983-88 - Juilliard (MBA), Harvard Law School (B.A., LL.B.), MIT (PhD.)
1973-74 - Oxford University for advanced preschoolers - here I discovered several new elements and disproved Einstein's theory of General Relativity but I haven't told anyone yet

## MILITARY SERVICE

1985- - CF-18 pilot R.C.A.F - 43 confirmed kills in Gulf war (3 unconfirmed)

- Awarded Victorian cross, twice, for bravery
- Foiled Russian coup while undercover in Moscow
- Enlisted in Canadian Astronaut program, currently scheduled to fly aboard Space Shuttle Columbia, in January 1993


## AWARDS

- Rhodes Scholarship
- Nobel Prizes in Literature, Physics, Chemistry, Computer Science (new category) and Peace
- Numerous Research Labs named after me
- Keys to New York, Moscow, Hong Kong


## SPORTS

- Olympic gold medals in Decathlon, Hockey, Skeetsurfing
- Hang-gliding, Climbing Mt. Everest, conquering the poles, bungy jumping off the MC with the Pink Tie
- Mr. Universe 1984-1986
- Grand Slam Champion in tennis 1988
- Crossbow, long bow, compound bow champion of the world 1990


## ACTIVITIES

- "the fifth Beatle"
- charity work (i.e. feeding the third world, creating world peace, and solving environmental problems)
- general-secretary of United Nations
- MacGyver fan


## REFERENCES:

General Norman Schartzcoff, Steve Jobs, Bill Gates, Michael Gorbachov,
Pope John Paul II (character reference)

## Students Stop Studying

Conspiracy Uncovered

## WATERLOO, ONTARIO :

As the cool breese of spring swept over the University of Waterloo Campus these last few weeks, it has slowly become apparent that something was affecting the students' ability to study. The results from the first assignments are conclusive, either the work is getting too difficult, or something is affecting the students' minds.
In our investigation, we interviewed a student that had had a $98 \%$ average going into this term. So far, she is failing 3 of her courses and is worried about midterms. When asked if she was doing anything different, she just said that she seemed to be spending a lot of time around the Campus Centre listening to the music until all hours of the morning. 'They play some really great stuff. It really keeps my foot tapping.'
We found this interesting, so we stayed a day outside of the establishment called the BombShelter, an on-campus pub. Our findings were astounding. From noon until $1: 30 \mathrm{am}$ the music was blaring, and you could hardly hear yourself think. But there was something in the air that kept your attention, but nothing was clear.
Going on a hunch, I approached the manager of the BombShelter as he left the building the next day. When confronted with the question of the loud music, he clammed up and ran away shouting 'I knew it wouldn't work'. I thought we had found our man.
A specialized music swat team came and checked out all the CD's and cassettes, and there were messages that were hidden in the notes. The phrases on these tapes were designed to hypnotize the student body, and make all the mega-brains flunk out so the students that were failing already would take someone with them. But thanks to me and my Campus Affair team, the world of $U(W)$ is safe once again.

## Those Undocumented Compiler Options

In the past few years, the compilers students use have become so complicated that often an organization (other than the creator of a particular compiler) must (re)explain to the user all of the options avalable.
I have attempted to provide a list of some of the more common options found in the computers here at $U(W)$.
-Wall Erects a brick wall, removing all complex programming commands from view, thereby satisfying course restrictions and simplifying marking.
-O Orchid option - for those who miss Orchid, this option slows down compilation by a factor of ten, and compiles the code to be compatible with Orchid, VIC20's, and other similar machines.
-C Breaks your leg, thereby requiring that you use a 'cast' for every arithmetic operation you perform.
-D A new option from the Swedish programmer Hjärl Tjolskben, will add program documentation, generate function headers and create function prototypes. Hjärl has promised an english version by 1997.
-H Using some of the basic precepts of the Hiesenburg Uncertainty Principle, this option ensures that the more certain you are of a program's results, the less certain you are of the program's syntax.
-A Amiga emulation - the program is compiled with random exit points. When executed, this code will halt the program, crash the operating system, and spew some obscure reference to Tibetian Monk prayers.

Billy Bates
The Bitsnatcher

## Enter Prof

(With apologies to Metallica)

Say your prayers little frosh
Don't forget, my student
To include SOC 101
Screw you around, OSAP ain't in
Keep you too tired for sin
Till professor he comes
Sleep with pencil in hand
Gripping your textbooks tight
Exit: hope
Enter: prof
Write exam
Then come back to my class again Study hard, stay up in fright
Drink caffeine day and night
And hope like hell you get it right
Dreams of integrals
Dreams of short due dates
And village food you ate
Sleep with pencil in hand
Gripping your textbooks tight

## Exit: hope

Enter: prof
Write exam
Then come back to my class again
Now I lay me down to sleep
Pray the lord my scholarship I keep
If I die before I wake
One less exam I have to take
Hush little Mathie, it's three AM
What the hell was Fermat's Little Theorem
It's just that lease, you can't sublet
Second rounds, career a wreck
Exit: hope
Enter: prof
Carrying that exam
Exit: hope
Enter: prof
Fail exam
Come back to take my class again

## mathNEWSquiz \#2

## Submissions? We don't need no stinking submissions!

Good day squizzers! Welcome to another fun-filled, exciting tour of Squiz! Hold onto your hats as you peruse through last issue's answers: 1) the US Open; 2) Billy Smith (not Ron Hextall); 3) Chattanooga rookie lefthander Virne Beatrice 'Jackie' Mitchell, 17 years old, struck out Ruth in 4 pitches during an exhibition game, then, immediately following, struck out Lou Gehrig in three pitches; 4) Ted Williams ( 16 consecutive onbases); 5) Ruthless People; 6) City Slickers; 7) Caddyshack; 8) Necessary Roughness (Cathy Ireland! Shwing!); 9) Sparrow; 10) the big Dick, Richard Nixon; 11) Carrie (1974); 12) Piers Anthony's Xanth; 13) 14 ; 14) 6 ; 15) who cares? no one answered it; 16) 6; 17) White, Black, Red, Yellow, Blue, Green; 18) Black, Brown, Blue, Red, Orange, Yellow, Purple, Green; 19) Red, Blue, Green; 20) Blue;

Here are the following people who submitted their answers: the question is moot - no one submitted any answers. So, the winner of last issue's squisprise is *drumroll* $\ldots$ oh hell, why bother with the drumroll when I'm the one getting the prize. Yup, I win! Thanks everyone, I couldn't have done it without you! Thank you! Thank you! I most humbly thank you! Here's one more chance for you to win that fabulous squizprize:

## Countries of the World

1. What is the only country in the world beginning with an ' O '?
2. What is the largest country in Africa?
3. Where is Andorra located?
4. What is the northernmost settled city?
5. What is the only country without a rectangular flag?

> Cards
> (for those Comfy Lounge People)

1. What are the other suits in an Empire deck of cards?
2. Which card is known as the curse of Scotland?
3. In Denmark, what is the luckiest card in the deck?
4. How many cards are in a standard Tarot deck?
5. What card is the representation of death to the Hungarians?

## Movie Quotes <br> (Name the movie)

1. "Where are you going?"
"The bathroom, wanna come? Doctor said I shouldn't lift anything heavy."
2. "Aristotle is not Belgian, the central message of Buddism is not 'Every man for himself', and the London Underground ' is not a political movement!"
3. "Did you ever imagine in all your life you'd see a Mercedes fit inside the trunk of a Cadillac?"
4. "It's a penis stretcher. Wanna try it?"
5. "Why didn't you want me to know you were a virgin?"
"Cause it's my business, it's my personal, private business!"
"Well, Brian, it sounds like you aren't doing any business."

## Pro-Wrestling <br> (A different kind of Soap Opera)

1. What do Andre the Giant, the Ultimate Warrior, and the Undertaker all have in common (besides the fact that none of them can wrestle worth a lick)?
2. How long did Ric Flair have to wrestle at Royal Rumble ' 91 to win the WWF Championship ( $+/-1$ minute)?
3. How many times has Ric Flair won the NWA World Championship?
4. Who holds the record for the shortest World Championship reign among the Big Three organizations (i.e., AWA, NWA, WWF)?
5. How long did the above record holder reign as Champion?

## Sports

## (Some toughies)

1. How many fair balls have been hit out of Yankee Stadium?
2. On June 26,1944 , what teams played the only three-sided baseball game in major league history?
3. What was the final score?
4. How long was the longest professional (not necessarily major league) baseball game on record?
5. What was the length of the longest football touchdown run?

To submit your answers follow these very simple instructions (there are no pictures, so you may have to translate for your friends in Arts): take your pencil/pen and write your answers on a piece of paper, sign your name, and drop the answers off into the BLACK BOX located across from the Comfy Lounge on the $3^{\text {rd }}$ floor of the MC. Make sure you get them in before $6: 30 \mathrm{pm}$ on Monday, June $22^{\text {nd }}$ to be eligible for a fabulous squizprize that I was fortunate enough to win this week. Have fun!

Monsieur LeFlouffe



## gridCOMMENTS

Second grid of the term! Wow, now I get to publish those grids I spent all (well some) of my work-term writing. I wrote half a dozen cryptics of which I hope some will get in here this term (besides this one, of course). If not, well, then we have lots for next term. If the cryptic is too hard, too bad. If it's too easy, try using only part of your brain to make it tougher. I guess we'll know when solutions start coming in (or don't, as the case may be).
Thanks to the folks listed who created a conventional version for me and even made up the clues. Colour me grateful.
These ever-so cool people actually submitted solutions to last issue's grid. Paula \& Ron, Rebecca, for the cryptic, and Thunderstorm, Mortimer Icabob's Holistic Gridword Agency, and Rebecca for the conventional. And the winners of the week are: (insert drum roll here) Paula \& Ron, and Mortimer Ieabob's Holistic Gridword Agency. Come by the MathSOC office to pick up your prizes. There will be more cool, oops, I mean harsh, prizes for the randomly-selected correct solution to each grid. Puzzles for fun and profit!

Comments about favourite things, and life in general were, Uniters of the World - WORK!, Reality is for people who can't cope with drugs, favourite Seinfeld episode was the one where they get in a limosine and George is mistaken for a neo-nazi leader, and favourite DQ Blizzard flavour is Skor.
Thanks all for your comments, and let's get some more solutions in for next time. Stay cool, uh, I mean, harsh.

Gridfuzzy with assistance from Harvmonster R
mouse \# 1 and 2

## Cryptic

## Down

1. Logical route in Scandinavia (6)
2. Sounds like casting out makes you thin (8)
3. Hearing wind and paddles is wrong (6)
4. Sturdy? Road help (5)
5. Have sex with hesitation between others (5)
6. The era of corn (3)
7. Ciao! Blum goes wild in South America (8)
8. Her rat allowed screw-ups (6)
9. Alloy interferes (6)
10. Circular distances cool behind shades (5)
11. Dug up denim jeans (5)
12. I hear there's a lineup for playing pool (3)

## Across

1. Sharp jabs at husk for interviews (12)
2. Again, the spanish film (4)
3. Not surreal, lying (6)
4. Wound and raze (3)
5. The centaur bungled a reach (6)
6. Protest made crying central (5)
7. One hundred headless thought rises (5)
8. Less two again? (6)
9. Sounds like backwards idiotic clay (3)
10. Empathic faculty head can't be had (6)
11. Civil and previous presidents are tucked in (4)
12. Stage David an incorrect handicap (12)

## Conventional

## Across

1. A type of induction
2. A good place to score from
3. Squirrel, porcupine, guinea pig
4. Cigarette ingredient
5. No need for more
6. Carry a big...
7. Birth place of the phoenix
8. Two parallel lines
9. Man's name
10. Woman's name
11. Computer geek/musician acronym
12. Four French horns ( 2 words)

Down

1. Male title
2. Very complete
3. Bog-like
4. Moon's effect on the water
5. Frantic actions
6. Computers connected together
7. An utopian thinker
8. The feeling you've been here before
9. To help
10. Candy, life ...
11. None of these can result in no service
12. Type of display on an alarm clock
