

## lookAHEAD

mathNEWS
November 1
November 11

Issue \#3 declared \#1 for a day
6:30 pm, MathSoc (MC 3038)
November 15 Issue \#4 plays a game of Quidditch
Math Faculty
November 1 WD Deadline
MathSoc
Thursdays
November 2
November 5
November 13
November 22
MGC
Wednesdays Mmm ... pizza

## PMC

November 13, 14 SSASMS
Co-op
November 1 Continuous-phase Postings Begin
November $8 \quad$ Work Reports handed back
MEF
November 1 Funding Request Forms due
November 1 Funding Council Nominations due

## Miscellaneous

## November 1-3

November 4-9
November 5
November 11

Homecoming Weekend
East Asian Festival
My Big Fit Greek Dinner in Toronto Rememberance Day

## Container Screw Consortium

## Review

Do you know how to make semaphores and mutex locks wit only one atomic instruction? How about only using load an clear? Ok, so you aren't Carlos, and that wasn't your task. Hov ever, if you had of come out this weekend to the CSC Min conf, you would have learned all the crazy ways HP PA-RIS differs from other platforms.
Anyway, I would like to thank our three speakers, Carlo O'Donnell (UWO), Marcus Brinkmann (G10), and Neal Walfiel. (UML) for coming out and giving three great talks. I hope eve ryone who attended learned something of GNU/Linux, the GNT toolchain, and attributes of a crazy upcoming Virtual Memor, Manager.

## So we can't do everything we promised.

I would like to apologize to anyone who was expecting to attend and learn from the Romp through the Linux kernel talk or the GNU Hurd: A Multiserver OS, we were unable to get these talks organized in time for the dates we have set out. Thes talks are still planned but have been delayed for a term, or two

## We can try though

Although October turned out fewer talks than we wanted, w have filled up November with more than enough content to make up for it. Now, since I think I may have learned from $m$ J mistakes I will not publish the schedule in mathNEWS. The real reason I am not publishing the schedule is that it is online at http://www.csclub. uwaterloo.ca and the rooms are on the webpage.

## Why Student Representation Is Important

One of the most important services that MathSoc provides and perhaps its most poorly advertised service is that of academic representation.
By academic representation I mean the representation of undergraduate students on informational and decision-making committees of the University.
Until I took the job of MathSoc president, the curriculum process was a bit of a mystery to me. Our careers as students are governed by the 1 -inch thick Undergraduate Calendar, but how is the text of tome that actually set?
I now know that there's a (usually) long and arduous process required for changing the course calendar and that a large number of committees review the changes before they're approved.
I also know now that instead of the process being a deelarative process from the faculty and administration, it is possible for student involvement and student input in the process that's academic representation.
In the Faculty of Mathematics, for a change to an existing plan or the introduction of a new one, the process starts at the department level, often with faculty who come up with an idea. A committee within the department (or school, in the case of CS) will flesh out the idea and come up with a concrete list of changes: changes to course descriptions, pre-requisites, and plan requirements. This proposal will then be made to the Undergraduate Affairs Committee which investigates how all math
plans will be affected. After that, it proceeds to Faculty Council (soon to be Representative Council) for approval. After this point, it proceeds almost unfettered through approval by Senate Undergrad Council and Senate, at which point the change is official.
Students have representation on most levels of the process, but are missing representation at the most influential stage at the beginning, when the idea is being formed. As many know, it's easier to affect an idea when it's just being formed instead of when it's already been through 2 or 3 other committees.
MathSoc is working to get representation on these depart-ment-level committees. We already have students sitting on committees in the School of Computer Science, and are working with the C\&O Department on a similar plan.

Is this just increasing academic bureaucracy? No - students will have meaningful involvement in the decision making process. You may recall when the Bachelor of Computer Science was being proposed. There was limited input then in the form of a forum with the general student population, and your student representatives also provided input in the process.
Once we have students helping form ideas instead of just approve them, then we can ensure that the courses that we take are most relevant and meaningful.

Douglas Stebila
MathSoc President

# Important Dates for Nov. 1 - Nov. 15 from CECS 

## November 1

Teaching Option: Ranking Forms available after 10am. Forms due back by 4 pm .
Continuous Phase Co-op Job Posting \#1: Available by 12 noon. Apply to this posting if you had no interviews or were not ranked in the initial interview phase (excludes Architecture and Teaching Option).

## November 4

Initial Phase Job Match Results: Posted at 3pm. Meetings for students without employment at $4: 30 \mathrm{pm}$ (excludes Architecture and Teaching Option).

## November 5

Continuous Phase Co-op Job Posting \#1: Expires 8pm (excludes Architecture and Teaching Option).
Acceptance of Employment Meetings with Co-ordinators Day 1: For students matched with a job. Check the Co-op Bulletin Board, 1st floor Needles Hall for your scheduled appointment (excludes Architecture and Teaching Option).

## CAREER SERVICES WORKSHOPS

Work Finding Package for International Students: International students learn best approaches to search for work in Canada after graduation from UW (including visa requirements). 4:305:30pm.
Business Etiquette and Professionalism: Covers dining etiquette as well as appropriate behaviour at interviews, employer receptions/sessions, and other networking activities. 10:3011:30am. Sign up at www. careerservices. uwaterloo.ca.

## November 6

Acceptance of Employment Meetings with Co-ordinators Day 2: For students matched with a job. Check the Postings Board in Needles Hall for your scheduled appointment (excludes Architecture and Teaching Option).
Continuous Phase Co-op Job Posting \#2: Available by 12 noon (includes Architecture).
Teaching Option: Job Match results posted by 11am.
CAREER SERVICES WORKSHOPS
Interview Skills: The Basics: Learn the fundamentals of successful interviewing. $3: 30-4: 30 \mathrm{pm}$. Sign up at www.careerservices.uwaterloo.ca.
Interview Skills: Preparing for Questions: Discuss and learn from taped excerpts of actual interviews. 4:30-5:30pm. Sign up at www. careerservices.uwaterloo.ca.

## CSC Continued ...

## Shameless Plug

No dates, but coming up in November will be my talk on Automatic Memory Management, otherwise known as Garbage Collection, come and learn what your garbage collected program is really doing while you ignore your memory leaks. I'm doing the abstract RIGHT NOW, so I will have this one ready to go.

James A. Morrison President UW Computer Science Club, Fall 2002

November 7
Continuous Phase Job Posting \#2: Expires at 8 pm .
Teaching Option: Acceptance of Employment Meetings with Co-op Advisors for students matched with a job.
CAREER SERVICES WORKSHOPS
Successfully Negotiating Job Offers: Increase the odds of getting what you want when negotiating salary and other details related to the job offer. Geared towards graduating students. 2:30-4:30 pm. Sign up at
www. careerservices.uwaterloo.ca.

## November 8

Continuous Phase Co-op Job Posting \#3: Available by noon. CAREER SERVICES WORKSHOPS
Letter Writing: Learn how to use letters to your advantage in the job search. 10:30-11:30 am. Sign up at
www. careerservices.uwaterloo.ca.
Resume Writing: Discover techniques for writing an effective resume. 11:30-12:30. Sign up at
www. careerservices.uwaterloo.ca.

## November 12

Continous Phase Co-op Job Posting \#4: Available by noon.
November 14
Continous Phase Co-op Job Posting \#5: Available by noon.

## Orientation 2003 Wants You!

Hi everybody! It seems like this year's Orientation Week just ended and we're already starting to plan the next one. As Math's newly chosen Orientation Directors, we'd like to say hello and encourage you all to become involved with Orientation. Application sheets are available outside the MathSoc office. Right now no less! Go run and get one. We'll wait. hmm ... doo doo doo ... Oh, Welcome back! The first info session will be held Monday Nov. 11 ${ }^{\text {th }}$ at $5: 30 \mathrm{pm}$ in MC 4045. The second will be the next day, Tuesday Nov. $12^{\text {th }}$ at $5: 30 \mathrm{pm}$ in MC 4021. The same info will be talked about at both, so you only need to go to one meeting. Interviews will start shortly after that. There will be sign-up sheets for interview times at the info sessions. If you can't make either session, don't worry! We still want your help. Just hand in your application to a MathSoc office worker and sign up for an interview time on the MathSoc Office door the sign up sheets will be posted there after the sessions. We're planning on making this the biggest, greatest Orientation Week ever and we can only do that with the support of dedicated enthusiastic volunteers like you!

Craig D'Amelio, Yolanda Dorrington, and Louis Mastorakos Math Faculty Orientation Directors 2003

## Retraction

In the last issue I make a retraction calling a complainer a both 'scrawny' and a 'commie' in addition to a slur regarding facial hair. I am really sorry to anyone who was offended by this, you may address any further complaints to moronic_complaints@mathnews.com. Thank you.

Ian W. MacKinnon

## The New Wave in On-Campus Housing for Summer 2003!

Most UW students spend their first year living on campus only 5 minutes walk to class, all inclusive, with amenities galore! Wouldn't you like to re-live that convenience - only now in a newly constructed or renovated, possibly air-conditioned apartment, with 1 to 3 of your best roomies?
After much input from current UW students, changes are taking place in terms of how students apply and secure on campus housing for the Summer term. For the first time, we are encouraging UW students to apply in November to the most sought after residences - before they leave campus on a January workterm. Offers will be made on a first-come, first served basis, so getting the type of housing you want will depend on you! Students repeatedly told us that they didn't want to wait and so we've improved the process to fit the needs of our students. In previous years, applications were not received until February!
Students can apply to live with friends at Mackenzie King Village (air-conditioned 4 bedroom and 2 bathroom apartments, no mandatory mealplan) or UW Place ( 2 to 4 bedroom and 1 bathroom apartments, no mandatory meal plans) or Village One (guaranteed single room with an on-site meal plan). Each facility offers various amenities ranging from pool tables and internet cafes to community spaces and bike rooms. All residence fees are all-inclusive (heat/air-conditioning, electricity, water, basic phone and cable, and high- speed internet access) - very convenient for the busy co-op student! All this with only a one term commitment, and you will receive priority to apply for on campus housing in Winter 2004!

The Department of Housing and Residences will be hosting the first ever Residence Open House for current UW students on November $8^{\text {th }}, 11 \mathrm{am}$ to 7pm. Just drop by Mackenzie King, UW Place or Village One to get a residence tour! Applications can be submitted on-line at www. housing. uwaterloo.ca, and will be processed on a first-come, first-served basis (also new!) - no longer a lottery system!

The improvements in facilities and process, at the request and input of students, have resulted in a very student friendly and student oriented housing program. Come check us out!

For more information, visit www. housing. uwaterloo.ca or contact Pamela Charbonneau, Manager, Marketing and Residence Life Development at pkcharbo@uwaterloo. ca to discuss your Summer term housing needs.

## Complaints of a Recent Grad

1. My actual degree really doesn't look like it's worth $\$ 40000$. Needs to be printed on platinum with pure gold ink.
2. Too many lazy people are getting through and devaluing my degree.
3. I no longer have any opportunity to pick up frosh.
4. Are those gowns we wear really worth $\$ 25$ ?
5. Why is RedKnee.com the only company hiring?

A Complaining Duuude

## Wanted

Stat 221 workbook from anybody who took the course back when it existed. Small but awesome reward available.

## Midterm Phobia

(Why only midterm? Don't worry. There's going to be more coming up: final phobia, test phobia, lecture phobia, school phobia, and eventually my entrance to some lunatic asylum... Stage One: cause
Algebra came too early - the exams were marked even before the calculus midterm was written! Marks were satisfactory, sol was lulled into complacency (What? You too?). Studying for calculus became merely an excuse not to go home that weekend.
Stage Two: early symptoms
It's my second math midterm now. Midterms are all the same. Don't argue because now the way we define midterm is not by the midterm itself, but by what is before it.
Def' n : A midterm is a formal event before which hundreds of people march off to the same destination in the dark.
Calculus midterm, surprisingly, is ridiculously easy! I was right not to study for it :).
No, wait. The result came soon and ... don't look at my paper. Was I just singing "Ode to Midterms" a minute ago? My paper got wrinkled from my tear. "No more midterms, no more ..." Stage Three: severe illness
But you guessed it: there's at least one more midterm. Not java again! From the Calculus experience, I started to study this time. The entire weekend, I designed and manufactured quite a few Robots[], cut up a cardboard and made some House models for a Monopoly game (no time to play), and even set up several BankAccounts for myself with virtually no money in any of them. By the end of the weekend, I wasn't able to talk and write in English.

TextInput in $=$ new TextInput();
System.out.println("How are you?");
System.out.print(">");
String answer = in.getLine();
System.out.println(answer) ;
Finally, my last midterm, hooray! Why is it so easy again? I'm glad that I know how to do all the questions; I'm scared because when I think it's easy, I usually don't do well. DC 1351 is suffocating me. Is anyone here breathing? I doubt it. Hand in the paper half an hour before the end of the exam, plunge out the heavy metal doors and once again, breathe in some cool air in the world, like I used to do long time ago.
No more midterms, well, this term. There will be finals, more midterms, more finals, more and more... Don't blame me if you get a nightmare, blame the exams.
The illness has developed incredibly fast so there's really no chance for the other phobia to emerge. Look, the madhouse's door is open. I'm ready.

Mad Cong $=\mathrm{MC}$

## Blue Bunnies

Blue bunnies don't actually exist. They are only white bunnies who have been kidnapped from their homes hanging in a noose and dyed blue by Softies.

## VPAS Encodes

Ok almost done, just one month and some exams to go. If I get a job I will be happy. But enough about me. What about you?
We told you it would be fun, and it was! Laser Quest was an awesome night, but don't worry if you didn't go, there will be another time!
If it is Saturday night and you are looking for something fun to do, head over the SLC and enjoy the Coffee House. We will have lots of cool acts all for no dollars and no cents.
Coming up in September we have a night of Candy Casino goodness, Family Feud for Charity, and of course the most excellent Charity Ball. We are going to have a ton of stuff to auction off.
FYA will also be holding some fun events. Like Pink Day on the $20^{\text {th }}$ of November, a paint ball trip on the $30^{\text {th }}$ of November, and a Bomber Pub Night on the $26^{\text {th }}$ of November. Keep an eyey out for more information.
There also will be a MathSoc Office marathon coming up later in November. There is nothing more fun that staying up really late and getting to know some new people.
The logo contest is closed and we are still working through the logos. Hopefully by the time this issue comes out with will have the logo finalized and good copies produced. Soon you will be able to get cool stuff with the logo on it as well.
The Comfy Committee is still working on ways to improve the lounges. We will be getting actual network drops onto the campus next work that will give you 10 times the speed as the wireless connection done. We will have tables and chairs setup for these ports hopefully by the end of the month.
There is still money out there to run events by mathies for mathies (and the rest of campus). If you are interested, or concerned about any activities or services just e-mail at vpas@mathsoc.uwaterloo.ca.

Pht VPASS

## Heed Thy Cult Leader

## Warning: There may be subliminal messages in this article

Hey asshole! You don't know what the hell you're talking about!
This mathNEWS production night was not prematurely aborted due to the placement of any commas, or any other wording or punctuation. There aren't many people here, but we don't have a quorum to worry about. No animals were harmed during production night, although the Comfy did smell like something died.

The Champ We will destroy them.

## Correction

Due to a clerical mistake, a bank error in your favour, and a formatting issue, the UW Math Seniority test scores of Anton and Snuggles were misreported in the last issue.
The real numbers are:
Anton - 179
Snuggles - greater then 210. Too many points in fact. Thank you,

## So You've Decided to Go to Class

As many of you are probably aware, there are these things called classes which sometimes occur in the production building of mathNEWS. You probably have a schedule of suggested classes that you are to attend. Classes generally occur between the times of 8 am and 10 pm . Supposing you decide to attend one or more of these classes (maybe not even your own), here is a list of things you can do to occupy your time.

- Write a mathNEWS article.
- Read a mathNEWS article.
- Draw pictures of random animals on your notes.
- Draw pictures of random animals on the notes of the person next to you.
- Write a continuous story with your row. (A continuous story is, of course, the stories in which one person will write three words then pass along the paper for the next person to append to. You can send these to mathNEWS.)
- Play "Pass the Prof". (This is a game in which you pit one side of the class against the other in a wild battle to get the prof to spend the most time on your side of the classroom by any innovative means.)
- Play "(Your course here) Bingo". (With this version of bingo you will draw a five by five card and fill each square with a word that you expect the prof to say. This word must be one of those things ... yanno ... like 'the' or 'and' or 'or' ... In addition, the regular "free square" is replaced by "Uhh ..." or some other common phrase that your prof says.)
- Play "Intercept the Play". (The object of this game is to watch for another student putting up his/her hand to ask a question and when this happens, immediately raise your hand in an attempt to get the prof to ask you first. You only win points if the prof asks you first AAAAAND you have a relevant question.)
[Of course, you get bonus points if the irrelevancy of your question makes the prof or the other team laugh - KreasEd]
- Exchange your soul for a donut.
- Eat a donut.
- Take notes. (From the person next to you.)
- Actually take notes. (If you really want to ...)
e. (Impressed with how many souls I still own ...)


## Formal Friday

Next Friday, Nov. $8^{\text {th }}$, is your chance to dress up. Are you getting frustrated having to dress down every day or face the dreaded question, "Do you have an interview today?" ... "No, I just happen to like looking respectable."
Get all dressed up next Friday. Show off your style. Tux, gown, nothing is too formal for Formal Friday.

SkarfBoy

## Road Trip Report

85th Convocation
Fire Alarm-rrific! Make sure you bring your two year-old cousin to next Convocation

## Love Lost

Rees, we need to talk.

Dear Rees,
You really put me in a very difficult race condition. It was a very nice tcp-stream you sent me last fortnight; I enjoyed creating a certificate on your thought-stack. You've always been a very responsive client to me, and you hardly ever drop the connection.

We need to ping. I'm sorry that events have caused you so much swap-thrashing. I never meant for you to block on my process, and I think you ack'd a spoofed package if you think I ever told you I wanted a lock. We should get our semaphores synchronized, and you should move on with your queue.
I like you as a peer, Rees; but not as a co-server. Perhaps we can still share files from time to time, or exchange routing information, but I want to keep our relationship at its current QoS. So when I say, can you route this email, it's really only that, and you should handle it appropriately.
I hope this helps you unwind your stack, Rees; if you ever need something, as a peer, I'll be happy to serve it. If it means anything to you, there's nothing between Merrill and me; our link has a metric of strictly 10.
I hope a reboot cools you down, Rees, and that when you power-up again you'll still ack my datagrams. You'll always have a special case in my routing table; and some day, I'm sure you'll find another wonderful server in whois to start your own domain with.

Ack
Fenchel.math 129.97.204.94

## Complaints of a Not-So-Recent Grad

1. My actual degree really doesn't look like its worth $\$ 40,000$. Needs to be printing on platinum with pure gold ink
2. Too many lazy people are getting through and devaluing my degree. Like Keizo
3. I no longer have any opportunity to pick up frosh, wait a sec , I do have an opportunity to pick up frosh...
4. Are those gowns we wore really worth $\$ 25$ ?
5. Why is Schneider's the only company hiring?

## Animal Math

If Math were an animal, I think it would be a gorilla. If you mess with Math, it's like messing with a gorilla; it'll destroy you, and eat your brains. Math is complex, yet simple, just like the gorilla. Math follows certain laws, just like a gorilla follows the laws of the jungle. Math equates to intelligence, and gorillas are relatively intelligent, and gorillas evolved into humans, which are intelligent enough to do Math. If you were to use simple Math, and understand it, it will treat you right, and help you, just like a trained gorilla will help you and be your friend if you understand the gorilla's habits and be nice to it.
If you understand complex equations you can do and discover amazing things. If you understand and observe close enough to the life of a gorilla, you can learn many unknown and interesting things. If you hate Math, and openly show it, Math will not work for you because you will not let it, just like if you openly taunted and hated a gorilla, it would not work for you at all. (In fact, it would probably retaliate.) Most people hate Math because it's ugly and too complex, just like gorillas are considered ugly to many people, and are considered too complex.

I once saw really smart gorillas in the movie Congo, and that's why I think Math is like a gorilla. I think Math and Science go together, and Math is very smart in itself, that is why I made the association with smart gorillas to Mathematics. Gorillas can be manipulated to do certain things if you know how to do it, just like Math equations. Humans are Math, and gorillas evolved into humans, so gorillas are Mathematics. Gorillas can be trained to make $\pi$, quoted as "the most delicious number under 5."

CosmicFiend

## Math Definitions

Theorem: A statement that if somehow disproven will render the entire course you are taking useless.
Lemma: A statement that has not yet been promoted to Theorem.
Corollary: Something the writers of text-books put in to kill white-space, usually comes after a Theorem that can be easily re-worded.
Conjecture: A statement that is in limbo, it cannot be proven, and no counter-example can be found.

Ian W. MacKinnon
Outdated Hip Hop Reference



## Self-Referential

Sometimes I feel like a nut. Other times I think I'm much more of a raisin kind of guy. My life continues ever onward. It's snowing today in Banff. Stupid snow. I realise I currently live in a place known for having high snow falls. I realise that the only reason this community even exists is because of high snow falls here. Doesn't mean I have to like it. It's too freaking cold!!
So I started singing the "Baby Beluga" song the other day. I do this whenever I get bored and can't think of something better to sing. Andrea thinks it's hilarious. Not that I sing the song, but that I don't have any idea what the melody is. I tend to just sing the "Frosty the Snowman" song but stick in "Baby Beluga" everywhere you should say Frosty. It works really well if you ignore all the references to snowmen and make them undersea references instead.
I like words that occasionally, for no good reason outside of entertainment value, get an extra vowel thrown in. Classics of this genre include "hump-y- back whale", "pic-a-nic basket" and "David M. Stern".
So IIIIIII like to type out my broken record.
Last night I was working on this slide scanning presentation. See I have two jobs while I'm here in Banff. One's your normal programming type dealy (ooh ... that's another good one) and the other is just scanning slides into a computer. I get paid nearly as much for the slide scanning as I do for the programming. I think it's pretty funny. In fact my slide scanning job pays more than my job from my first work-term. Actually it pays $50 \%$ more now that I think about it. Heh. So I'm sitting bored at work scanning slides and I decide to go exploring the building. Oh, did I forget to mention that the slide scanning happens at night when no one else is in the whole office building and they gave me a pass key that opens every door to the building. How sweet it is. So I went exploring in my company's store rooms in the basement. They have all kinds of crazy stuff - old magazines, reels of film from the ' 70 s. The weirdest is that they have all these tapes on hog raising. Now I couldn't figure this out why does a multimillion dollar heli-skiing company keep hog raising tapes in storage? So I popped one in the VCR in our guides room. Turns out that up until about 5 years ago, when people paid thousands of dollars to go do extreme skiing in the lodges here, one of the perks was fresh pork products. Very fresh pork products. Every lodge raised a small pig farm and would usually have a big roast at the end of the season. And they made videos about it to show guests all the cute piggies at the lodges. I wonder how many people realised they were going to eat their little piggies.
Why would a piggy eat roast beef? Isn't that kind of betraying your own kind? Where own kind means farm animal? It reminds me of the Far Side where a bunch of cows are standing around as one of them munches on a bit of steak. "I'd say we taste like chicken," she pronounces. Ignoring her cannabalistic tendencies, doesn't this imply that she's previously eaten chicken? I think that that cow and the third piggy might start a beautiful friendship.
I've never seen Casablanca. I have a name sake in the movie. He's even French. Plus he wears one of those circular hats that all professional gendarmes should have.
Man-At-Arms. His daughter (Teila?). Ram-man. Mecha-neck. That flying guy (Swooper? Eagle-man?). Were there any other Masters of the Universe? I can't think of any off the top of my
head. After a quick Google turns out its Teela and Stratos. I don't think Orko counts - he's not really the master of anything. Is He-Man a Master of the Universe? It's always been HeMan AND the Masters of the Universe. Is that an exclusive "and"?
Try to vocalise the sound of Angry Boiling Porridge!! I don't think you sound angry enough. Nope. Definitely not.
Does anyone else find it impossible to edit there own work? Aaargh! Grr!

Waldo the alliterator!
What's wrong?

## Strange Rash

## You! Off our planet!

"... the campus right-wing nutcase ..."
Aaron Lee-Wudrick
It is there, it doesn't go away, it itches and it seems to think it owns the world. As far as I can see, a central ideal to the American implementation of free-market capitalism is that the amount of wealth you amass is directly reflected in the amount of work you have done to gain wealth. This would be great if only we all started on the same level. In the real world we see the rich becoming richer and the poor becoming poorer. Sure it is possible even if you come from a background with inadequate nutrition, education, and wealth to work hard enough to gain wealth. But someone in this situation will clearly have to work harder than someone with the advantage of the best nutrition, education, and anything else they need to develop due to wealthy parents. The converse is also true: people who start off in a wealthy position can become less wealthy if they are careless enough. The fact remains that a poor person will have to work much harder to gain the education, find capital to start a business, or to find someone willing to hire them. They will have to work harder to amass the same wealth.
One place I wish people were more level is education. I strongly believe education increases the quality of life. Skilled workers are often better than less skilled workers (though this issue is more complex). Uneducated people are more likely to cause violent crimes, as they can't see how the crime they cause can affect them and all of society adversely. If people were more educated, there could be more intelligent humour on TV (broadcasters and sitcom producers do take this into account). Also education is maintainable. In other words, if we started with an educated populous we could keep it educated more easily. The most important resource in a child's education is their parents. This of course also make it hard to get a population with a higher level of education.
So quality is more important? I disagree. I would much rather have everyone have a good education, than a few, the few with wealthy parents, having a excellent education. What is the point of a quality education if no one can access it? Especially around here, people seem to think there are a lot of stupid people in the world, and I wouldn't mind my tax dollars going to change that!
Ouch that hurt, having a point and all. Don't worry, this won't be a trend. I think I am getting itchy again.

## Harry Plotter and the Davis Centre

## Part 3

[So you may have noticed that last issue was missing its dose of Harry Plotter. So as a special treat to you Plotter fans (and so that we don't get any threatening phone calls), you get both part 3 and part 4 of Harry's adventures this issue! And all this at no extra cost to you! - AbsentEd]
The rest of the lecture alternated between recounting details of the testimony that the computer had given the previous night and threatening the computer in an attempt to get it to speak. At the end, the class was evenly split between those that believed that the computer could talk, those that didn't, and those who thought Xema had an extremely well developed sense of humor. Harry remained undecided about the computer, but there was another question that was eating at him even more.
Harry and Ellie arranged to meet for lunch the next day. Ellie then rushed off to attend some of her proper classes. Harry left the lecture hall and waited just outside the door while the rest of the students filed out. After all the other students had left, he walked back up to the entrance. Just as he placed his hand on the doorknob, he heard a strange sound from inside. It was a mechanical sounding voice, like the speech synthesizer used by Stephen Hawking, only more screechy and grating. It said, "That went well."
"That wasn't funny," Professor Xema's voice responded.
"I thought it was hilarious," came the robotic reply. Harry couldn't help himself. He silently turned the doorknob and pushed the door inwards.
"If you ever do something like that again..."
"You'll what? You humans are so..." The computer fell silent as the door hinge creaked. Harry stuck his head into the room hesitantly. The professor was staring right at him. "Did you hear anything, just now? Before you walked into the room?" he asked. When Harry didn't answer right away, the professor continued, "Never mind. What can I help you with?"

Harry entered the room self-consciously and walked up to the professor. "There was something you mentioned in the lecture, about the Davis Centre," Harry began.
"That's right. What did you want to know?" Xema asked.
"In the lecture, you referred to it as a computer, but I thought that it was that big building next to the MC."
Xema nodded. "Yes, I see. Have you ever been inside the Davis Centre?"
"A few times... briefly."
"Did you notice the strange stools and benches and pipes all over?"
"I did notice those. I thought they were just an architectural statement."
"No, they're functional. We're very big on efficiency at this school. Why build just a supercomputer when you can build some classrooms and offices into it as well at virtually no extra cost. That way, the building can serve multiple purposes concurrently. You'll find out in third year that we're also big on concurrency."
"Wow! What's it for?"
"I'm afraid that's classified information."
"Oh, right. Well, thanks for your time."
"My pleasure. See you on Wednesday."

## Part 4

Harry was sitting on one of the myriad stools in the Davis Centre. The particular stool he had chosen was right in front of the round glass enclosure that students commonly referred to as 'the fish bowl.' Harry always found it relaxing to sit and watch the fish swim around lazily in the bowl. He envied them, in a way. They didn't have homework or midterms or bills. All they had to worry about was bigger fish.

He was waiting for Ellie. She had agreed to help him prepare for the MATH 135 quiz on the mathematical proof of the existence of the universe.
"The corporate partners are so peaceful, aren't they?" Ellie asked, startling him. She was sitting on the stool next to him, and had probably been there for at least a few minutes.
"Corporate partners?"
"That's what the fish bowl is for, Harry. To hold the corporate partners who threatened to withdraw their company's funding. The University transmogrifies them into fish until they come to their senses."
"Ah," Harry said. He was beginning to get used to this sort of thing.

They continued to watch the fish swim lazy circles for another minute. "So are you ready to hit the library?" she asked eventually.
"Not yet," he began. "I wanted to ask you a question first, about the Davis Centre."
"You want to know what it's for."
"Yup."
"I'm sorry Harry, but nobody knows for sure. It's a secret."
"Aren't there any rumors?"
"Are you kidding? There's millions of them; that's the problem."
"Tell me some of them."
"Okay... Some people think that the computer is designed to calculate the ultimate answer to the question of life, the universe and everything. Others think that the Profs use it to bell the class averages for the required minimum $70 \%$."
"Let's find out," Harry suggested.
Ellie rolled her eyes and said, "You'll do anything to keep from studying, won't you?"
"If I fail, it's my problem. Come on, aren't you curious?"
"Sure. But lots of smarter people than us have tried to solve this mystery, and we still have nothing but rumors."
"Lets just look around a bit. It couldn't hurt."
"You need to study."
"One hour. Just one hour and then we'll get to work."
She didn't know whether or not to believe him, but ultimately decided that he would probably argue for an hour before he started studying anyway. "Alright," she said. "One hour. There's a door labelled 'Authorized Personnel Only' in a secluded corner of the basement of the library. We could start there."
"Great! Hey, this isn't some trick to get me to go into the library to study, is it?"
"Just get moving."
To be continued...
Bradley N Smith

## A Shocking Finding

The calendar on the wall says November and that means only one thing - winter is coming and the air is getting dryer.

Okay, I know what you are thinking (and I probably am wrong, again). The above is obvious to anyone who lives in Waterloo. You don't need to be told that the air is getting chilly and the wind is getting drier.
The return of winter brings joy (usually in the form of hockey, long hours of sleep, and snow) to some and gets some others depressed, VERY depressed (okay, this is common knowledge, too).

Many people may develop dry skin, scratchy rash, colds, flus or seasonal affected disorder (SAD, quite an appropriate abbreviation, I have to say). I usually encounter some of the above each winter, but none of them bothers me too much for too long. However, there is a condition that hits me every winter. No matter what I do, it just keeps showing up every year. You may be wondering "What is 'it'?" "It" is run-of-the-mill static electricity.
For some odd reason, I am highly conductive. During the winter season, every time I touch a metal surface, I get zapped. No matter what I do, I can't get all the electricity out of me. I have tried covering myself up, opening doors with a wooden pole, using grounded outlets, and opening a door without using keys (i.e. ramming the door), and the electricity still manages to find me.

Maybe electricity is the source of everything wrong with me. Those who have read my articles may find me a little odd, maybe that's because the static electricity has fried some of my nerve cells. I have ruined a handful of computers (none of which are in UW), maybe my electric hands have something to do with it. Did I mention that my place encounters frequent brownouts? (About as often as mathNEWS hits the stands). I could give more examples, but I don't want to destroy the computer I am typing this article on.
One more thing, it appears that I get more shocks every year, and I heard that there are a few comic-book-based movies being made. Hmm... maybe this excess of electricity can help me launch my movie career...

Jason "the Screamer" Lau Shockingly Electric (Yeah right!)

## Coffee House Time

So this $2^{\text {nd }}$ of November will be the Homecoming, Turnkey, Warrior Weekend, MathSoc Coffee House. What is it exactly? Well it will be various kinds of performances from dance to bands to reading done in the Great Hall of the SLC. It is free for everyone and will have a very groovy vibe. So come out and relax for a bit. I am sure you will have a good time.
monkey

## Candy Casino Night

After the success of Trick-or-Treating, MathSoc's next social event is going to be yet another candy-related event! Yay sugar! The Candy Casino will be held on Tuesday, November $5^{\text {th }}$. If you like gambling without losing money, and where you can eat your profits, this is the event for you! See you there!

## Mathetry

## An ode to $f(n)$

Oh $f(n)$, oh $f(n)$ - How I log to derive without you, without you - How will I survive? As your limit goes to infinity
I get a feeling deep inside Are you growing? Are you shrinking? Can I bound you from above or below? To understand you oh $\mathrm{f}(\mathrm{n})$
These things I wish to know

## How you're so big $O$

The sum of your parts I wish to describe from i equals one to $n$ your summation cannot hide. I'll find your bounding function.
Integrate you if I must.
For I know you're big Oh of $2^{n}$.
Your function grows with exponential lust.

## Sum of your parts are only pieces

The part of my vector space at which you comprise Is a subspace of my elements (all finite in size) The linear transformation that exists from me to you Has been described by some as $T$ of $u$ in $U$.
But in the end you know the truth if your basis
For all the vectors you contain are belong to us.

## C Mok

# mathNEWS Referenced in Complaint to Iron Warrior 

## Aaron discusses BLACK BOXes

No, I'm not about to discuss the mathNEWSBLACK BOX, we all know about that. I'm referring to the black blotches that showed up in Iron Warrior a while back. The October $25^{\text {th }}$ issue of Iron Warrior contained a letter to the editor from a reader who complained about the black boxes and noted that I was making fun of them in a previous issue of mathNEWS. The response from the editor was that it was a "last minute omission" of material.
First of all, I am amused that anybody actually read my selfproclaimed filler, and furthermore, I find it hilarious that it was referenced in a complaint.
Hopefully the engineers can secure the rights to the porn or whatever it was that they were trying to censor, and get this matter all sorted out. Best wishes from the staff at mathNEWS, where the only BLACK BOX is the one people submit profQUOTES and articles into.

Yeah, so mail your complaints to those guys and make us look even better.

> By the way, get your capitalization and italics right - it's written as mathNEWS.

## Family Feud

On Wednesday, November $13^{\text {th }}$, you should all come out to Family Feud. Compete in teams against other Mathies, people from other faculties, and maybe even some faculty members. Survey Says: it's going to be a blast!

## profQUOTES

"...but I don't think that I'm going to loose my pants - they're tight enough."

Berry, CS 445
"Who has taken the automata class? OKay, you tell the class that I'm not bullshitting."

Berry, CS 445
[Regarding the midterm] "If I say: 'Show something', for god's sake, show it."

Berry, CS 445
"I'll mount the monkey later."
Brandon, PHYS 121
[Wrote the word 'Lemma' much smaller than his usual writing] "This is a baby lemma."

Crippin, MATH 235
"To understand vector spaces, you first need to understand Vector the cereal." [Holds up Vector cereal box]

D'Alessio, MATH 115
"I have the authority to do anything I like!"
D'Alessio, MATH 115
"There are students who'll say 'Aw geez, it's a hard course.' Then they write the exam and say 'he makes easy exams.' Then they get the exam back and say 'aw geez he's a hard marker.'"

Hoffman, PMATH 330
"You can get a million dollars if you know how to do that in polynomial time. But if you know, you might as well keep it secret and make more money breaking RSA codes."

Hoffman, PMATH 330
"CS trees grow downwards, because as far as I know, computer scientists spend most of their time upside down."

Jackson, C\&O 330
"Come to my office after class so I can get you alone ... I have all the equipment."

Laber, GER 101
Student: "But how do we know they are distinct?"
Prof: "Fine, I'll give a proof by example."
Lawrence, MATH 145
"This is a pretty wacked out looking ring, eh?"
McKinnon, PMATH 334
"I see some confused faces, I see some bored faces, and I see some faces that are asleep."

Muller, BIOL 365
"I will now give birth to a vector space!"
Ng, MATH 245
"We need an explanation of how S\&M works." Nishimura, CS 466
"What's a real world example of this? Newton's balls!"
O'Donovan, PHYS 115
[Talking about elastic collisions] "... so basically we're consid ering the bounciness of the collision, but we can't use the term 'bounciness' in physics or engineering. We have to use big words or polysyllabic words, since 'big' isn't good enough either."

O'Donovan, PHYS 115
"Now, this is a rather difficult question, so I'm not going to do it."

Park, MATH 137
"If you're going to quote me, don't get me in trouble with Eugene. He's bigger than me."

Ragde, CS 341
"Eugene, what kind of a Russian name is that? That's not a Russian name."

Ragde, CS 341
[About the midterm] "We can't keep you working on it all night, it's not OS."

Ragde, CS 341
"That midterm last night was a random act of meaningless violence."

Ragde, CS 341
"Who really cares about multiplying matricies, except for the people who teach 370?"

Ragde, CS 341
"...if i were a little more honest, but being a teacher I don't have to be..."

Richter, C\&0 103
"I just want to point out that your calculus class is totally useless..."

Richter, C\&0 103
"Now it could burn your anus. But I'm not sure. Don't quote me on that."

Rye, SMF 204
[Smells dry-erase marker] "You could get high smelling these things."

Schellenberg, MATH 239
"You didn't see this here. I'll erase it right away."
Schuurmans, CS 486
"Are you still with me? You're not still with me... just nod and pretend."

Schuurmans, CS 486
"Whew! I thought mathematics was proven inconsistent for a second. I hate when that happens."

Outlaw Shallit, CS 240
"If you use your professional credentials, I will use Einstein on you!"

Smith, ECON 101
"Maybe I should fall down and break my neck. That would be entertaining."

Smith, ECON 101

## profQUOTES

[On where to find him next term] "DC 1351. I don't have a life any more."

Smith, ECON 101
[On why he is so tired he can't even speak coherent sentences] "Whatever. Put the words in the right order."

Smith, ECON 101
"Masturbation is merely the act of making love to the one you love best."

Smith, ECON 101
"That's why I like tormenting the young."
Smith, ECON 101
"Every time I get a joint, I look at it... and I see if I can break it in half."

Struthers, STAT 330
"r'll write this for those of you who like this... which may just be me... so I'll write it down for my benefit."

VanderBurgh, MATH 235
"I can reverse engineer this process... sorry, I said the 'e' word again."

VanderBurgh, MATH 235
"Not surprisingly, computer manufacturers avoid putting little pieces of uranium in your PC."

Vasiga, CS 240
[ 30 seconds before the start of the midterm] " $I$ don't think this exam is particularly easy."

Vasiga, CS 240
"Let's not talk about the midterm, shall we? Let's remain friends."
Vasiga, CS 240
"Expected' is one of those words you can use at work. I expect to get this job done by Friday... that's not saying it's going to get done. I also expect to win the lottery, quit this job, and tell you all to piss off."

Vasiga, CS 240
"It's so fun to write in external nodes. You kill a lot of chalk trees doing this."

Vasiga, CS 240
"Whenever you hear 'yadda, yadda, yadda', you should think 'Induction'."

Wagner, MATH 239
"We can't do proof by contradiction, so what do we do? Well, the only way to do proofs are by contradiction or induction, right? So, we'll do induction."

Wagner, MATH 239
"What I am about to explain was rather confusing for the morning class. So... you've been warned."

Wagner, MATH 239
"For every Epsilon, there exists death."
"The fact that blah is blah has nothing to do with it."
Wood, MATH 137
"Blah is the most important variable in the world!"
Wood, MATH 137
"So the proof of the mean value theorem is tilt your head and apply Rolle's theorem."

Wood, MATH 137
"I've got this bad memory of my kid coming home with this math question about a box with monkey in it, and they were chewing coconuts or something. I'm supposed to know about mathematics, and I just couldn't do this question."

Younger, MATH 135
Choo choo! Another set of profQUOTES chugging down the track! Send in your profQUOTES to mathnews@student. math. uwaterloo. ca or drop them off in the ever present BLACK BOX just outside the Comfy Lounge

## I MACK @ UW

## New 2003 Orientation Positions

Well, it's official we have three new Orientation Directors for the double cohort; Kenny and Snuggles, don't let the door hit you on the way out. Jokes.
I had a recent imaginary interview with one of the three new directors where some changes were discussed. The most important one was that of ten new orientation positions to be filled in addition to Leader, Co-ordinator, Icebreaker, Director, and Tie Guard. The ten new positions are:

1. Walking Coaster - Keeps nice, cold beverages within arms reach of Co -ordinators
2. Liability Scape-Goat - Does nothing but sign important documents
3. Director-Food Taster - Thwart any attempts to poison the Directors
4. Can of Whoop-Ass - Makes sure all leaders are adhering to PACO rules
5. SPAZ - Carry a clip-board and walkie-talkie and create stressful clatter on the radios, must have own car (Volkswagen preferred)
6. SPEDCOM - The Special-Ed Committee, the Mathie attempt at EDCOM
7. Golf Cart Pit Crew - On stand by to tune up the FOC golf cart at a second's notice
8. Soul Broker - Selling Orientation advertising to corporate sponsors
9. Log Guard - Guard the display case on the third floor holding the Natural log
10. Helicopter Ninjas - Tear-assing around campus in a Sikorsky disturbin' shit

Hope you find one that you like; applications are now available.

## Some Remarks on the Squirrel(s) at UW

I have been paying close attention to the squirrels here. There are several things that I find very odd about them, as they do not behave like most squirrels in Ontario, or even the world. These are a few things that I have noticed in my first month here.

1. They spend all their time near a University. They are surrounded by people, yet none of them are tame. They all run away when you approach them. This is odd, as most squirrels that live in such close proximity to humans eventually learn that we do not want to eat them and that we can give them food. This becomes another point.
2. Their presence in this area is due to the University. Do you think that if the University were not here, that the squirrels would still be in such high numbers in this area? I don't think so at all. I am pretty sure that they are in a symbiotic relationship with us. They take some food away, and clean up the nuts and stuff that the trees drop. They really get all of the benefit. They get shelter, food, and lots of space to make nests. If they are here because of us, why don't they like us? Why do they run?

## Survivor Winning Strategy

"In this circle we have twenty-one (21) flags. Each team takes turns removing either one (1), two (2), or three (3). The team that removes the final flag wins immunity."

Sound familiar? Well, that's from my transcription of last week's episode of Survivor Siam. I was amazed to see such a simple exercise in recreational mathematics in such a sucky show. It reminded me of my days in C\&O 380, and a family of similar questions.

Quickly we see that the goal is to leave the other team with four flags. Then whatever amount they take, you can remove the remaining one to three flags. Now, to leave your opponent with four flags is the same as leaving them with zero, so you leave them with eight. And so on, thus the winning strategy is to remove flags so that the remaining number is divisible by four. So for a Survivor dorks, the team that starts has already won if they are smart. But they weren't, were they?

Recreational mathematics: It's like a fire ... In Your Face!
Simon L'Avier

## Morning Shower

Some people need a morning coffee to get up.
Some people need a shower to get going in the morning.
Some people just combine the two, but I hate shower water in my coffee, and the shampoo just don't taste so good.

This all led to the development of: CAFFEINATED SOAP.
Now you can wake up and get your caffeine in the shower without having to worry about shampoo in your coffee. Don't think this is for real, check it out: www. xoxide.com/ noname16.html.
Now if only we can get the CSC to use it ...
3. Squirrels live in trees, yet the only times I see them is when they are in wide open fields where there could be no nuts or other squirrel-chow to munch on. I find this odd as well; as it would make sense that they would be in the forests and not come out in the open, where all the scary humans are.
4. Have you ever seen more than one squirrel at the same time? I have - they are all different colours and shapes and sizes and types and ears-size and tail-bushiness, and speed and always concentrated on what they are doing/ eating.
These points can lead me to only one possible conclusion: there is really only one or two squirrels at the University of Waterloo.
How can this be? I have seen more than one at the same time! They all look different! Well, the answer lies in that crazy subject known only as "Physics". Chris' theory of matter and the squirrels of Waterloo is that there is only one squirrel at Waterloo. This squirrel has existed since the dawn of time. It's existence can explain why there are seemingly so many squirrels here. This squirrel will be referred to as "The Squirrel".
The Squirrel has negative mass or no mass at all. It is made out of tachyons or some other strange Star-Trek particle. The reason that you can see more than one squirrel on campus is because The Squirrel can move faster than the speed of light and is very good at deceiving unsuspecting humans. He is super intelligent; He knows everything since He has been around forever. He likes to appear in many places at once, by moving very quickly from one exact location to another and back again, an infinite number of times per second.
As it is painfully obvious by now, this explains the four things I mentioned above about the odd squirrel behaviour:

1. If He were to touch you, He would nullify, so that is why He runs away from people.
2. His job is to clean up all kinds of odd particles (neutrinos, tachyons, stray quarks, mesons, etc.) so that they do not affect us. We are indeed in a symbiotic relationship.
3. He cannot live in trees, because He would nullify (I know what you are thinking, but air is thin enough so that it cannot hurt Him; He simply moves fast enough to avoid all air molecules).
4. When The Squirrel is hit by an exotic particle of any kind, He is thrown into a state of flux. He splits into two squirrels: a regular squirrel and an anti-squirrel. With the energy released from this separation, the regular squirrel gains some new attributes that differ it from the original squirrel, so that it can appear that all squirrels look different. After the energy-transaction is complete, the anti-squirrel's anti-particles will be infused with enough energy to convert it into a tachyon-squirrel, so it can exist in our universe again. By taking this further, you will find that all squirrels on earth are originally spawned from different particle reactions with The Squirrel. Different particles will create different squirrels.
Thank you for reading this far. It has been a great pleasure to finally reveal my peers' and my theories of this odd four-legged creature.
squirrelKING

## Bored of Regular Board Games?

Why not play Shit*? This is a new FUN interactive board game invented by ohh ... let's say ... the PMC Exec. (Woohoo for stealing! ... I mean ...) The game goes like this:

- Two Players
- Two sets of $n$ similar playing pieces (where $n>m^{2}$ )
- An $m \times m$ Grid
- One side of the grid will be decided as the "bottom"
- Player 1 will start by telling Player 2 a set to play a piece from
- Player 2 will play a piece from the assigned set along the bottom
- Player 2 will assign a set to Player 1
- A piece may be played in any column (supposing there is room) but must be played as close to the bottom in that column
- Play will continue (with players choosing new (or same) sets for the other to play a piece from)
- The winner is decided when a player successfully creates a straight (diagonal, horizontal, vertical) line of four or more pieces from one set
[Shit! I lost again ... ahhh, so that's where the name came from ... - KreasEd]
'This game (Shit) is copyrighted by the PMC.
PMAMCOC VPCO


## mastHEAD

## Preemtive strike!

Hah! Huzzah! It's Saturday night and I'm writing the mastHEAD! Production Night is still a few days away ... what wonders will it bring? Right now it's either 1 am or 2 am depending on whether time has moved backwards yet. It's weird how we decided to just move time around twice a year just so we can save some daylight. I like the nightlife, I like to boogie.
Speaking of moving time around, I'm getting a premonition. I predict that while munching away on pizza, a question will arise. A question quite quintessentially quixotic. A question that asks: "If you were a saint, what would you be the patron saint of?" I also predict that people will answer this question in droves. Luckily some of those answering the question are the mathNEWS staffers who said: Ian MacDonald (Evil), Jim Morrison (two fists), Pete Love (Molson Export), The Duuude (Alexander Keith's), Eric Logan (The blindingly obvious), Jason Lau (Confusing Mumblings), Diana Chsiholm (chocolate and cotton candy), Aaron Klotz (Public mischief), Anthony Dharmasurya (Sweater kittens), Ian MacKinnon (Pre-wrapped bacon), Christopher Thompson-Walsh (Hungry decanonised saints), Krease (The unexplainable), Lino Demasi (Dianetics), Dave (slothness), Ken Chung (Your mom), Snuggles (Innuendo) Simon L'Avier (Time travellers), and Albert O'Connor (That's what SHE said).
Thanks to the earth for the food we enjoyed and to the sky for the air we were breathing Monday night. And, from us in Waterloo, thanks to Louis who did so much proofreading Monday night, that we could spend Tuesday goofing off with the cover (and congratulations on becoming one of the Orientation Directors). Thanks to Graphics, I'm sure you'll do an excellent job printing this issue ... because if you don't ...

> Louis Mastorakos (Yogi Bear)

## How to Argue with a Mac Junkie

Co-requisites: CS 251 and STAT 231

Greetings, faithful mathNEWS readers. Last week I was rather disappointed to see that there were no more Scientology inserts in Imprint. I was finding that the inserts added some muchneeded entertainment to our campus-wide student newspaper, and I am somewhat sad to see them go. Now it's back to discussing why quorum wasn't met and meetings were adjourned due to the placement of commas. I was also hoping to be able to continue my lambasting of Scientology and cults in general, but alas, it's not going to happen. Sigh.
Speaking of cults, today I want to talk to you about Mac users. First and foremost, I would like to stress that now that OS X is out, I don't really have any beefs with the Mac. My problem is that its followers can be so damn ignorant when it comes to other types of computers.
I got into a fight with a Mac salesman one night, and it became quite apparent to me that any attempt to convince a hardcore Mac junkie that there are other viable platforms is an exercise in futility. You can imagine my amusement when this guy told me I was an idiot because I disputed his claim that the PowerPC G4 is a fully 128 -bit CPU. (Well maybe you can't, but work with me, people.) Its SIMD registers may be 128 bits wide, but so are the SIMD registers on some other architectures *cough* Intel *cough*.
Then he starts telling me about how Apple ran the Mac Xserve in a benchmark against IBM and Sun servers and blew them out of the water. Well, I took a look at this so-called "benchmark." They used a genetic sequencing application called BLAST, and ran it on all three platforms. Fair enough, until I noticed that the version of BLAST they ran on the Apple machine includes "algorithmic improvements, memory management, and velocity engine support." In other words, they swapped in some faster algorithms and utilized processor-specific SIMD instructions to get better results. Did they do that on the IBM and Sun boxes? No. Can anyone say, "confounding?" Apparently Apple's marketing guys didn't take STAT 231. Yet they claim that they are more honest than their competitors. Of course! About as trustworthy as Intel and everybody else. Take it with a grain of salt, folks.
And for the record, I think the flat-panel iMac looks like a swiveling Etch-a-Sketch.

## Aaron Klotz

## Top 13 things to do November $1^{\text {st }}$

13. Laundry (Boo-unrs, no wonder this suggestion is $18^{\text {th }}$ best on this list)
14. Celebrate your unbirthday
15. Celebrate Valentine's Day
16. Celebrate All Saints' Day
17. Celebrate your birthday
18. Come to school dressed up as a cynical university student
19. Keener Bingo
20. Sign up for the Fields Trip
21. Trick or Treat in the student ghetto
22. Fall in love
23. Fill out an application to become a frosh leader
24. Read mathNEWS
25. Buy cheap chocolate bars and deep-fry them

## Faculty Wrestling

It's time for the battle of Waterloo, a no-holds barred tag-team wrestling match between some of the hottest rivalries among CS instructors.
Tonight's fight features Team Exponential Power, with Rhabakar "Violent Violin" Pagde weighing in at 251\#\# (pounds) and Vroy "Vroy the Impaler" Tasiga weighing a scrawny 240\#\#. They are facing Team Integral of Destruction, P.J. "Pretti Boy" Pretti, weighing in at 246\#\# and Zugene "Crazy Russian" Eima, weighing a massive 341 \#\#. The referee for the match will be "Wild Bill" Cowan. Tonight's matchup is brought to you by the letter e and the number i.
That's all for introductions, LET'S GET READY TO RUMBLE!
The match begins with P.J. Pretti and Vroy Tasiga in the ring. P.J. wastes no time and gets Vroy in a singly-linked list headlock! Vroy quickly iterates through the list, discovers its circular nature and gets P.J. in the headlock! But wait! P.J. deletes the headlock, and Vroy gets garbage collected! Incredible! Vroy staggers, but manages to tag in Pagde who comes in swinging with a muliplexer!
P.J., blinded by Pagde's hot pink short shorts, never saw it coming! He's in trouble! Eima jumps in the ring to defend his teammate, but Wild Bill protests his bad interface for not being tagged in. Eima distracts Wild Bill with a program specification, and Wild Bill falls in an infinite loop! The referee is out!

Eima hits Pagde with an improved travelling salesman algorithm, which stuns Pagde! But the algorithm still takes too long, and bores Pagde. What's this? Pagde has left the fight to continue his quest for a better cup of coffee. But where's Vroy?

Eima and P.J. appear to have defeated the other team, and look to the audience for adoration and praise, but half the crowd is already asleep. Vroy charges back into the ring, having spent the last few moments enqueuing heavy rocks into a deque chair! He hits P.J. with it, and P.J. falls to the mat cold! Eima sees the deque chair, and calls clear() on it, disarming Vroy. Vroy grabs Pagde's former Associate Chair of Curriculum, and beats Eima mercilessly! Vroy, being the last man standing, wins it all!

And there you have it! Vroy wins the match, the title of Faculty Wrestling King of Waterloo, and the adoration of WIM! The time of the match was $O\left(n^{2}\right)$. Once again, this match was made possible by the letter $e$ and the number $e$.
The second match, a cage match between the instructors of CS 370, was cancelled due to not enough interest.

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Fuzzy
mathNEWS is normally a fortnightly publication funded by and responsible to the undergraduate math students of the University of Waterloo, as represented by the Mathematics Society of the University of Waterloo, hereafter referred to as MathSoc. This is the ISSN that doesn't end. Yes it goes on and on my friend. Some people started reading it not knowing what it was and they'll continue reading it forever just because mathNEWS is editorially independent of MathSoc. Content is the responsibility of the mathNEWS editors; however, any opinions expressed herein are those of the authors and not necessarily those of MathSoc or mathNEWS. Current and back issues of mathNEWS are available electronically via the World Wide Web at http:// www.mathnews. uwaterloo.ca/. Send your correspondence to: mathNEWS, MC3041, University of Waterloo, 200 University Ave. W., Waterloo, Ontario, Canada, N2L 3G1, or to userid mathnews@student.math. uwaterloo.ca on the Internet.
The Darkest One, Silver Jet, The Dire Wolf and The Dark Canuck: Louis Mastorakos, Chris Harasemchuk, Bradley T Smith and Albert O'Connor

## From the depth of the graphics lab...

(see if you can guess which one is from cs342)
I've been here all night Nothing renders correctly
Then madness ensues
I trace a few rays
Spheres don't appear as they should
My fist through the screen
damn it! foiled again
various vulgarities
time to try again
go raytracer go! the computer grinds away

I hope it ends soon
normals are evil fixing things by random guess my mind is now mush

Pictures all fucked up Negative one solves problems

All is happy now
stupid starry thing pain in the ass to render it haunts my nightmares
midnight in the lab. my polyhedrons still suck. damn, they look messed up.
fuck, fuck, fuck, fuck, fuck. this stupid course can blow me. did i mention, fuck?
subtract, multiply. intersection does not work when these are confused.
you philosophers
and your damned noodle party can shampoo my crotch.
needless newsgroup posts are signs of a feeble mind. stop wasting my time.
thirty hours per week. no windows, dim lights, all guys. welcome to The Lab.
my puppet dances.
he is made of many spheres. he makes me happy.

## Free Association

## What did you say?

So anyway, I'm back sunning myself in Waterloo after a brief return to the battlefield in Toronto (or perhaps I mean that the other way around), and I suddenly remember why I'm here (apart than from my sines and coses).
I mean, I never thought I would in all gravity and respectfulness comment to someone that I did it twice last night - and mean that I proved by contradiction. Come to think of it, wouldn't doing the impossible be a term of approbation anywhere else? Never mind the people who wandered through the centre of my quad loudly talking about how "she had three partners in one week" - of the computer science project variety (Hah! Doesn't she know all the best coders are done the CS 1 XX assignments in 20 minutes?). Don't even talk to me about "finger."
Really, if there were half as much in the air as innuendo round here, Western would never fear mockery again. On the other hand, perhaps I'm just bitter about Toronto.
Speaking of Toronto, don't ever try to get there via any means of ticketed transport, or any 400 -series highway, on Friday afternoon before Thanksgiving from K/W. Of course, I'm sure some would wonder why anyone would *ever* want to go to Toronto; but let's say you're a glutton for punishment, like me (Besides, a priori, it's really a nice city. Really!). As for VIA Rail ... They haven't hired enough Realtime grads.
Actually, I think the only really efficient way of getting to Toronto on Friday afternoon before Thanksgiving is to ride one's bike. Plus, K/W to Toronto is downhill (literally, not metaphorically!! I would therefore suggest thin tires, a roadmap, and lights. To misquote the old saying about Texas, "go east till you smell it, go south till you step in it." Who's with me?
The point of this article, is, of course, to amuse myself, and to tell EMACS that I only want to be friends after 3 hours of close contact in a desperate attempt to code something up. I feel if we don't spend this time together now, I'll never be able to stand

## Haiku Class

Only three haikus I have too much work to do and am uninspired
cs341 assignment 2
We learn from the notes
Of course we plagiarise them
They are all we know
cs341 midterm
Midterm was too hard
With a failing average
Now I must withdraw
cs 445 , cs 354 , cs 341
Three major courses
Assignments due on same day
Does anyone plan?

## White Bunnies

White Bunnies like to be hung in windows. Many white bunnies are tagged at birth and remain tagged for life because they cannot reach their own ears to remove the tag.
it again. And while I'm all for honesty in a relationship, I can't help but feel that I may have another all-night stand I'll need a LISP-based operating system around for, shortly before my next due-date (or possibly mathNEWS Production Night). Funny listening to something along those lines right now. 80's music in MathSoc. Another thing University is educating me about.
So yes, Waterloo is beginning to get to me - much as I'm feeling slightly more at home - or at least, more at Waterloo the University, rather than Waterloo the battlefield. Or at least, if I'm at the battlefield, I'm Bruckner or Wellington or someone. Or optimally, a vulture.
Still, if ever I feel that my sanity is too distant a speck on my horizon, the Church (cough) of Scientology will be there for me. Though whether that's for me to compare myself to and feel better about my rationality or to join, I leave as a rhetorical question.
. And if that doesn't work, there's always the Imprint editorial board, who elected that the evangelical publication in question constituted an appropriate addition, integral and without disclaimer or discriminant, to the Dent.
Really good essays have a grand and o'erarching theme, a thread which weaves through their every line, in point or counterpoint to the myriad motions and phrases which all build to the wonderful assertion of thesis in the final paragraph. These are the sort of essays that get universally argued with, nailed to great oak doors, burned, cursed, and worst of all, their authors executed. So I'm glad I don't have anything like that here. Notwithstanding the "grand and o'erarching" sign inviting me to "get serviced here," I don't even have an innuendo. Or at least, that's what she said. (EMACS is a *****!)

## Witless Waterloo Students

OK, I know Imprint sucks, but it recently got worse. Nobody answers the campus question with anything funny. Are we not witty? What is wrong with Waterloo students? Oh yeah, we have no social skills, and we play video games all day.
So last week's campus question was "What do you think of using portables on campus next year?" The best answer had something to do with Trailer Parks, not bad, but the rest blew Keizo's dick. Nothing witty, nothing ... how about:
"I think the regular bathrooms are fine, who needs port-a-potties?"

Pete Love
"What's wrong with the stationary ho's?? Why make them portable, they might just run away!?!"

Pimp Daddy
"Ahhh, porta-wuzzyy ..."
Rohypnol Victim
"The extended patio at the bomber will need portable bathrooms."

## The Duuude

Actually it's not the people who answer the question, it's the questions, they suck ass. Like the Bomber's mix of the old stale leftover beer ... yuch.

The Duuude and Pete Love

## Super-Easy Quiz

This week's Super-Easy Quiz will be really easy. Super-easy, in fact. We will test your knowledge of ... ohh ... say ... Hallowe'en.

Find the item in the list below that does not match the Hallowe'en theme.

| - Angel | : |
| :--- | :--- | Ghost 1 Fresh Vegetables

If you think you have the right answer and you wish to claim your prize, bring all of the left-over candy you can find/buy to the MathSoc Office.

## Retraction

In the last issue I make a retraction calling a complainer a both 'scrawny' and a 'commie' in addition to a slur regarding facial hair. I am really sorry to anyone who was offended by this, you may address any further complaints to moronic_complaints@mathnews.com. Thank you.

Ian W. MacKinnon


## Anecdote of a Virgin Phallus Climber

Last Sunday October $27^{\text {th }} I$ had the distinct privilege to conquer the world's largest free standing phallus. I was persuaded into doing it with claims of a cleaner complexion and greater affection from the United Way. However, I had lingering doubts and a sinking suspicion that it would end up being too much to take in at one time. The air was cool and the wind unwelcoming last Sunday morning, yet I knew that the inclement weather would not shrink my determination. I waited in line with kitty anticipation as those who came before me engorged the erect edifice. This train of a line continued for quite a distance allowing us to gain a slalom reverence for the size and girth of the phallus we were about to climb. As we waited, we were instructed as to the proper entry and exit procedure in order to ensure that we did not stick our heads where it was not welcome. Also, safety was a paramount concern, for we did not know what was left behind by those who had mounted her last.
Finally, we were expelled from the holding area and we rushed into the shaft. It was a warm and sticky place within the womb of the tower. The sweat and bodily fluids of the people who went first gave the penetration a rather sloppy disposition. Being a virgin in such pursuits, my enthusiasm got the better of me and I thrusted as deep and as quickly as possible up the tower. I realized in short order, however, that my stamina could not maintain the feverous speed for any great length of time. Realising that I would reach exhaustion before satisfaction, I started to think back to what was taught to me in gym class. Slowing to a more sustainable pace, I began a very rhythmic scaling of the phallus. The pace was a pleasant one, neither too slow, resulting in a dulling of the senses nor too fast, increasing the likelihood of injury. (It must be noted that what ever practice one does on one's own, it would never compare nor adequately prepare you for reality.) Said pace continued from some time, all along I received occasional feed back on my progress towards our mutual fulfillment. Nearing the end, I began pick up the pace hoping for an impressive eruption upon reach the summit. I finished to the sound of cheers and acclamation from lookers on, always assuring me that all the sweat and fatigue was for a good cause. I then received a $t$-shirt that proudly displays the duration from start to climax.
Looking back, I seem to have adopted a very missionary approach to the task at hand, lacking the needed creativity to make it a truly unforgettable conquest. However, being that it was my first time, and being told that it was supposed to hurt, at least a little, I did not want to tear anything important. I do believe that my inexperience was compensated by my youthfulness, vigour, and enthusiasm. I made a couple of mistakes, fumbled around a little, and learned much as I went along. I will do better the next time and grow proficient in the years to come. Creativity will follow, realising that one could learn a lot from those instructional video from the Internet. But when all is said and done, through it wasn't the best; I can rest assured that the tower really enjoyed the experience.
[Yes, he climbed the CN Tower for the United Way - Simon]
Sir John of Flag

## What's a BCS?

My two cents ...

Well, I'm sure you've all heard of the new BCS, or Bachelor of Computer Science program that will 'officially' start next fall (F03). But do you know what it's about beyond that? There will be an information session on Thursday November $7^{\text {th }}$, at 5 pm in DC 1350. (This will be a repeat of the session held on October $9^{\text {th }}$.) The rest of this article is my synopsis/interpretation of what the BCS is.
Those of you who are in CS right now are in the BMath 'version' of CS (which means you would get a Bachelor of Math with Honours in Computer Science when you graduate). The BCS version would give you a Bachelor of Computer Science. Of course, that's just the surface difference.

Requirements: BMath(CS) vs. BCS

| Requirement | BMath(CS) | BCS |
| :--- | :--- | :--- |
| Math Core Courses | 8 | 7 |
| More Math (non-CS) | 3 | 0 |
| CS Core Courses | 11 | 9 |
| Other CS | 4 CS $4 x x$ | 3 CS $4 x x$ |
| 3 CS 3xx/4xx | 10 non-Math | 10 non-Math* |
| Other <br> 4 free choice | 8 free choice |  |
| Total | 40 | 40 |

(*Must satisfy restrictions below)
At first glance, it the BCS looks a lot easier - I mean, it's essentially switching 4 required Math courses for 4 free choice courses, and getting more choice in the core CS. (For those who want to know, the Math core course that was dropped is Math 235.) The basic changes to the CS core between the BMath(CS) and BCS are:

- CS 245 Logic - new required course for BCS
- CS 354 Operating Systems - renamed CS 350
- CS 341 Algorithms - no change
- CS 342 Concurrency - becomes optional, renamed CS 343
- CS 360 Theory - becomes optional
- CS 370 Matlab - becomes optional

Alright, time to explain the * in the requirements list above. The free choice/non-Math courses are 'restricted' in that they must satisfy one of the three following requirements:

1. Fulfill the requirements of a minor, joint, or full Honours plan from outside the Math Faculty
2. Make up a plan and get it approved by the CS advisors. This isn't very likely though; it's predicted that most BCS students will satisfy the last requirement:
3. Fulfill the breadth and depth requirements.

## Breadth (all of these)

- 2 credits in Humanities (History, Philosophy, Language courses, Classical Studies, Drama, Fine Arts, Music, \& Religious Studies)
- 2 credits in Social Sciences (Anthropology, Economics, Geography, Political Science, Psychology, Sociology)
- 1 credit from Science
- 1 credit from Science/AHS/ES


## Depth (one of these)

- 3 courses at a $3^{\text {rd }}$ year or higher level with the same prefix (not Math or CS). For example: HIST 339, 340, 341 (if you really like Europe)
- 3 courses forming a prerequisite chain of 3 (again, not Math or CS). For example: PSYCH 101, 207, 304.

It's worth noting that courses from the breadth requirement can be used towards satisfying the depth requirement. Also, it will take some planning to take care of the depth requirement, since many upper year courses in other faculties are restricted (the example of ECON 101, 201, and 301 given at the last info Info Session cannot be used since ECON 211 is required for 301, and it's not open to Math students). This requirement is to allow BCS students to gain more exposure to areas outside the Faculty of Math.
Now that we've had a second glance ... it still looks easier than the BMath(CS). I'm not saying that courses in other faculties are all less challenging than Math; I'm saying that there are paths of study made available by this requirement that are less challenging.
So with all this going for the BCS, are there any reasons not to switch? Short answer: Yes.

- The current BMath(CS) has a reputation as the best Computer Science degree in Canada. The new BCS degree, however, has no reputation - yet. With the difficulty level as it currently is, it may become known as the easy degree.
- As with any new program, especially those with new courses, there is the 'guinea pig' phase. CS 245 doesn't even exist yet according to Quest; it's only available through the online waiting list (www.cs. uwaterloo.ca/undergrad/ waitlist). This is a required course for the BCS.

There is only room for 96 students in CS 245 for Winter 2003. If you've read this far and are still interested in switching to a BCS, you probably already know that the deadline for signing up on the wait list for CS 245 is November 15 ${ }^{\text {th }}$ If you haven't already, I also urge you to talk with a CS advisor about why you want to switch to the BCS. After all, they're making the decisions about who gets into the program ... Drop them a line at csadvisors@student.math.uwaterloo.ca.

Krease

## Complaints Of A Relatively Ancient Grad

1. My degree is valued in stock option forms. The "golden" ink used for them was actually iron pyrite.
2. Too many persons with dubious part-time jobs and pastimes are getting through and devaluing my degree. Like Pete and Keizo.
3. I need to ditch my walker to pick up frosh. Unless, of course, they're mature students.
4. Do I have to pay another $\$ 25$ for a gown?
5. Why is McDonald's the only company hiring?

A Complaining Disco Stu

## Albert Sez

## We've got a deadline here!

It's like Snuggles Sez, but Snuggles doesn't meet his deadline, and we have some space to fill. You go home after a long night of eating at Mel's while others lay the issue, scanning some images, and talking to people. There you pass out (I don't go to sleep anymore, I pass out. Thank you soul sucking academic term.) and not worry about finishing layout tomorrow because when you wake up there will be Snuggles Sez waiting for you, you can just put it in the space, and everything will be, well, off to the printers. Then you can finally study for your CS midterm. But no, not me! I have to sit here writing a half a page of filler. I mean content.

So apparently I am dirty. At least some first year students I kmow seem to think I am very dirty. Most people I gather think I am just kind of dirty. To these first years (one of which just asked me this morning if she was mentioned in mathNEWS, ha ha, now you are!) who think I am very dirty I stated that Snuggles was far more dirty than I. They disagreed and I was shocked. Granted Snuggles has been good, so it isn't like I am mind bogglingly dirty, but still a bit too dirty for my liking. Dirty. So I pledge that some day next week I'll spend the entire day not being dirty. Hopefully that will, in some small way, make up for my gross dirtiness.

So late night, another first year, who I gather doesn't think me very dirty - hopefully just kinda dirty, gave me a watch.

Not just an ordinary watch, a stop watch. Not just an ordinary stop watch, a curling stop watch. Not just an ordinary curling stop watch, a dead curling stop watch. See I curl (Snuggles is on my team), and as I learned about last night curling is all about intimidation. So now I can look even more like I know what I am doing (and thus more intimidating) by having what appears to be a working watch around my waist. She even wrote me up some notes on about what times to say to sound like I know what I am talking about. Maybe I should try counting in my head one steamboat, two steamboat, and so on. She even offered me her spare provincials curling bag, but I declined. I don't want to look so intimidating that I then look pathetic when I actually curl.
Man I should got to ECE 223 now. I will be back to finish you later.

So I made the cops come to the third floor. It was early in the morning and I saw a friend of mine's bag just sitting out in the middle of the third floor. I thought I should take it and hide it. Obviously she needed to be taught a lesson. At the same time, the third floor is a relatively safe place, so don't worry too much about leaving stuff around, just make sure someone you know is around. Anyway, I expected her to come back before I left for a short meeting I had. But by the time I left for the meeting I had entirely forgotten about the bag. I am a criminal now.

## A Tribute to Brenda-Lynn



## mathNEWSquiz \#4

## Killer Load

Hey all, we had a great week for the squiz this time around. Here are a few answers to the questions. Lyrics 1. AC/DC You Shook Me All Night Long 2. Counting Crows - Mr. Jones 3. Bryan Adams - Summer of '69 4. Sir Mix-A-Lot - Baby Got Back 5. REM - It's The End of The World As We Know It; Movie Quotes 1. Jerry McGuire 2. The Signs 3. Top Gun 4. Any Given Sunday 5. Scooby Doo; Leafs 1. Robert Svehla 2. Darcy Tucker 3. Alexander Mogilny 4. Tom Fitzgerald 5. Trevor Kidd; Brenda 1. Ray Koprowski 2. Speech Communication 3. October 12, 2002 4. Pine Ridge 5. Brenda-Lynn Slomka.
We had a buttload of submissions this week, the scores are as follows (in some random order) Brian Sibbitt 25, SJU Crew 12, Phillippe McFadden 20, Philip Mitchell 25, Kyphosis \& Dee Great One 18. Alright, so that means we have a tie this week between Brian and Philip ... Philip wins on tie breaker because Ray is his Don and he was invited to the wedding. Congratulations Phil! You can pick up your prize in the Mathsoc Office whenever the editors get around to getting them there for you.
Lyrics

1. There's a ghost down in the hall

There's a ghoul upon the bed
There's something in the walls
There's blood up on the stairs
2. It's hard to believe that there's nobody out there

It's hard to believe that I'm all alone
At least I have her love, the city she loves me
Lonely as I am, together we cry
3. The place where i stand gives way to liquid lino Underneath the weeping willow lies a weeping wino
4. Wife beater perfectly fitting apparel Where's your brother Daryl? Where's your other brother Daryl?
Givin' me that Macho Man Randy Savage stare Wanna snap into a Slim Jim break my limbs but do I care?
5. Now this hot girl, she's not your average girl She's a morpharotic dream from a magazine And she's so fine designed to blow your mind She's a dominatrix supermodel beauty queen

## Movie Quotes

1. "That's thirty minutes away. I'll be there in ten."
2. "You are not special. You are not a beautiful or unique snowflake. You are the same decaying organic matter as everything else."
3. "'PC Load Letter'? What the fuck does that mean?!"
4. "No, I totally agree with you. Preparation H does feel good on the hole."
5. I don't like you. You know why? You don't curse. I don't trust a man who doesn't curse.

## Killings

1. Who killed Abel?
2. Who shot Alexander Hamilton?
3. Who was Assassinated June 28, 1914 ?
4. Who killed Jadzia Dax?
5. What football legend was acquited of killing his wife?

## Random

1. What are the first 10 primes?
2. If a random real number is selected, what is the probability it is rational?
3. Who won the world series?
4. What happens on November 11th?
5. Who's the black private dick that's a sex machine to all the chicks?
I hope you all enjoy answering the squiz as much as the writing of it was enjoyed.

## My Prof's better than your Prof

My Prof's better than your Prof
My Prof's better than yours
He marks easier
I'm still failing
My Prof's better than yours
My Prof's nicer than your Prof
My Prof's nicer than yours
My Prof's nicer
Until he reads profQUOTES
My Prof's nicer than yours
My Prof's smarter than your Prof
My Prof's smarter than yours
He writes neater
I'm still sleeping
My Prof's smarter than yours
My Prof's faster than your Prof
My Prof's faster than yours
My Prof's faster
Wish class was over
My Prof's faster than yours
My proof's stronger than your proof
My proof's stronger than yours
My proof's one page
It's a special case
My proof's stronger than yours
My code's cleaner than your code
My code's cleaner than yours
My code's cleaner
Still won't compile
My code's cleaner than yours
My major's better than your major
My major's better than yours
My major's CS
I'm in sixth year
My major's better than yours

## Cryptic Grid Clues

## Across

7. Dress top sounds like hooker with ice (6)
8. Coppersmith drops chops on license (6)
9. Said I will like Wight (4)
10. Plant mike, lewd broadcast (8)
11. (With 18) One sibling suggests the way you found it $(2,2)$
12. Step chimed (4)
13. It turned boy back from effect of moon (5)
14. Extras help burying garbage (5)
15. Will leader knock shawl? (4)
16. See 11 across
17. Weary at a contraption designed to come apart (8)
18. Metal press (4)
19. Admiration from reports of 18 th sequel to the A-Team (6)
20. Stop work to change a flat (6)

## Down

1. Plenty of properties (4)
2. Prefers lever I replaced to ring buoy $(4,9)$
3. Men fret about how to make wine (7)
4. Swap pleasantries but hide fruit (5)
5. Young guide directs for bonus marks $(7,6)$
6. Readers and writers sparked irate row (8)
7. Stop rescue as sport (8)
8. Petitions upset search party, abandoned chat (7)
9. First man in trade builds marsh (5)
10. Progress hides fiend (4)

## Conventional Grid Clues

7. Andian mammal (6)
8. Mexican party (6)
9. Appear (4)
10. Flurry (8)
11. Morning half of day (1.1.)
12. Jittery (4)
13. Buzz off (5)
14. Idolize (5)
15. Opposing prefix (4)
16. Provincial capital ("1.1.")
17. What you need to slalom in the summer $(5,3)$
18. Sisters (4)
19. Postpone (6)
20. Stand fast (6)
21. Succulent plant (4)
22. Generously (13)
23. Spicy hot dog (7)
24. Underway (5)
25. Hard to please (13)
26. Stout (8)

Across
12. Hippo hygiene and spa treat (8)
15. Rude (or electrical or computer or mechanical or ...) (7)
19. Cockeyed (5)
22. Bird-made home (4)


## Factor this!

Good weekend. How was yours? Oh, well, I guess that wi heal in time. Changing the subject, hey, how about that la Squiz? Did you hear, almost nobody submitted anything! Y not a single e-mail response. I know, surprising. No, keep reac ing.

The conventional was quite annoying because Philipp McFadden got the second best score on it with four correct a swers, but no answer to the gridQUESTION. The best solutio came from an unnamed person (with all but three answers co rect and no answer to the gridQUESTION either), so, unname person, come by the MathSoc Office and tell them what w unusual about your submission, you get the $\mathrm{C}+\mathrm{D}$ gift certif cate. Otherwise, I'm giving it to Phil.
I hope lots of people enjoyed the cryptic, but didn't subm because it had a theme! All the across answers began with ' $a$ ' and all the downs began with a 'd'. Only the SJU Crew ser in an answer, so I'm not even marking it. But here's a list of th members and who they share their birthdays with: Adat (Leonardo "da" Vinci), Coolest Jenn Ever (LL "Cool" J), an Stéphane ("The Incredible Hulk" Lou Ferrigno).
Back to a regular style grid this week (that's last issue's sol tion below me). Have fun and don't forget to answer: What wc your best trick or treat from last night?


