# math NEWS 

Friday, May 31, 1996

Inside:

- Prez Sez
- Squiz
- Prof Quotes ... and more!


Check out mathNEWS on the web!!!

http://www.undergrad.math.uwaterloo.ca/~mathnews

# (1) he $A C M$ <br> CSC Flash 

I transmit this CSC Flash from my cruise liner in the Caribbean, where I spend my free time drinking pina coladas with supermodels and playing shuffleboard with my sucker-arm. No one ever beats me - not twice, anyway.

## Past Events

The Unix I and Unix II talks were held on the $15^{\text {th }}$ and $16^{\text {th }}$ of May, by Jill Arnott and Nikita Borisov, respectively. Both have been lavishly rewarded for their contributions in food, goldpressed latinum, and slaves. For those of you who missed these talks and still find Unix as inscrutable as a cement wall, we do still have leftover handouts.

On the $30^{\text {th }}$, Christina Norman held her extremely successful HTML Tutorial. When this talk was first held, ravenous Christina groupies had to be driven off with water cannons. The online version of this tutorial is available at http://www.csclub.uwaterloo.ca/u/howto.html, and there is much less chance of getting soaked.

## Upcoming Events

One talk is coming up on the $5^{t h}$ of June: Intro to the Web, by Devin Carless. For those of you who want to learn how to surf the Web, some neat sites, or why Netscape is evil, come to this talk! Posters announcing the exact time and place will be put up ahead of time, or I will want to know why.

## CSC Elections

CSC elections were held, and the results duly noted. All of these self-sacrificing individuals can be reached at calum.csclub.uwaterloo.ca. They are..

- President: Blake Winton (bwinton)
- Vice-President: Nick Harvey (njaharve)
- Secretary: Viêt-Trung Luu (vluu)
- Treasurer: Nikita Borisov (nborisov)
- Sysadmin: Drew Hamilton (awhamilt)

It is requested that club business be sent through the appropriate mail aliases (e.g., president, sysadmin) not personal e-mail addresses, for club business. Otherwise, we'll sic LAST term's sysadmin on you. [Friendly people, aren't they? - CrakkoEd]

## Other News

As of this writing we have 499 active members, with even more coming in as our hunter teams report back with fresh captures. So renew your membership! You could be the five hundredth member this term!

## Prez Sez

Well the term is well under way, and hopefully you aren't too stressed by midterms and assignments!

On the MathSoc side of things, there is a lot of stuff going on. As usual, we are looking for people to volunteer for things such as Canada Day, 1B Info Night, and such. If you have any time to spare and are interested in helping out stop by the MathSoc office, MC 3038 or call us at 885-1211 x6515.

If you have not been to the Right Angle Café (formerly know as the C\&D) lately be sure to stop by and check out the new addition - CONICS, the ice cream bar. Yep, you can now purchase waffle cones with your choice of ice cream for $\$ 1.50$, $\$ 1.75$, and $\$ 2.10$ - depending on how many scoops you would like! Plus the patio will be opening soon - so come out and have a look.

Best of luck to everyone on their upcoming exams and interviews!

Rachel Nickie<br>President, Math Society<br>lrnickie@undergrad.math.uwaterloo.ca

## VPAS sez

Let's see. It's $1: 50$, I'm in the Bomber having a beer and trying to figure out what I want to write about. Monday at $7: 00 \mathrm{pm}$ is 1 B info night. This is a great chance to learn about what you want to major in, or if you are like me, figure out what you don't want to major in and then choose one by the process of elimination.

Our ice cream stand is open! Come by and visit Conics, good ice and the best prices on campus.

Big surprise this past week. Mathies are actually showing some spirit. There is going to be an election to choose two Math Fed councillors. Who are these people running? Well, let's see, there's Neal Parikh, Reenee Khanna, Etienne Phaneuf, and me, Xavier Aburto. The elections will be held on June 6 with campaigning going from June 3-5. Please come out and vote. Why? Because if you don't then you can't bitch about what kind of job the person elected is doing.

That's all for today.
X-Man

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The Totally Burnt-Out Editor: Mala "Crakko" Krishnan
lookAHEAD

| mathNEWS |  |
| :--- | :--- |
| June 10 | Issue \#3 production night |
|  | 6:00pm, MathSoc (MC 3038) |
| June 14 | Issue \#3 zooms to the stands |
| June 24 | Issue \#4 production night |
| June 28 | 6:00pm, MathSoc (MC 3038) |
| Issue \#4 whacks the stands |  |
| Math Faculty |  |
| June 5-7 | Winter '97 Pre-Registration |
| June 3 | Year 1 and 2 Info Night @ 7pm |
| MEF |  |
| June 21 | Deadline for Spring proposal <br> submissions |

## mastHEAD

Hey people! Another week, and another exciting issue of mathNEWS! Yay!!

It's Monday night, 9:58 p.m. (I'm sure you really wanted to know that) and we're just about done! I'm so impressed!

That's really good because maybe this time, instead of going home at 3 a.m., I'll go home earlier (1 a.m.?) after layout. Maybe this time, I'll actually get the Safety Van home and not have to walk 20 mins. all alone in the dark. Another detail I'm sure you're head doesn't want to store.

For those who haven't heard (and where were you?), we had a BBQ on Thursday ... and will have one every Thursday. It was such a great success that we had to turn people away! Sorry, Professor Goulden. Maybe next time (which, by the time you read this, will be yesterday. Oh well ...)

Each production night, the most dedicated and weird set of people around get to help to put the issues together. So ... here they are with this week's most awesome mathNEWS question, "If you confronted Mike Harris about the social cuts and had only one sentence to sum up your thoughts to him what would they be?": Warren "The Milkman" Hagey (Way to go Mike!); Greg "holograMMM" Taylor (I haven't been paying attention... What's being taxed? (Aside from my patience?!?)); Stephen "Pepper" Johnston (The cost of government is far too high, but let's not cut essential services); Chadwick Severn (This won't affect the Bear Patrol, right?); Viêt-Trung Luu (Mike who?); Andrew Archibald (I wish you were running my province); Carolyn MacLeod (Damned if you do, damned if you don't, eh, Mike?); and Will Chartrand (Do what you want to Ontario; I'm a Manitoban); Mike "Hammer" Hammond (Social cuts? I thought that you meant get-togethers at First Choice ${ }^{T M!}$ ).

Thanks, as always, go to those wonderful people at Domino's who make our pizza, to Marion at Graphic Services for doing whatever it is she does, and to Ra the Sun God for providing us with summer.

Mala "Crakko" Krishnan (Why don't you join your Social Services Minister [MPP for my home riding] and head out west to British Columbia?)

## Avoid Disappointment Preregister

A number of students were disappointed this term because they could not gain access to courses they wanted. In some cases, the could not get in to courses they required for graduation. The Departmental Chairs and I planned course offerings based on preregistration data. In some cases, little or no capacity was available to accommodate those who had not preregistered or who wanted to change courses at the beginning of term.

Preregistration takes place from Wednesday, June $5^{\text {th }}$, to Friday, June $7^{\text {th }}$. Please give careful consideration to the courses you want to take in Winter 1997 and be sure to preregister. This will assist us as we plan for Winter and will help make it possible for you to get the courses you want.

For those of you who have not yet made a decision about your major program, Information Night has been scheduled for Monday, June $3^{\text {th }}$ at 7:00 p.m. Faculty members will talk about the various undergraduate programs in the Faculty and answer your questions. Some upper-year students will also answer questions from their perspective. As a final incentive, the Faculty is providing refreshments for all Information Night participants.

Please participate in these activities to make sure you get the appropriate courses for next Winter.

Paul Schellenberg Associate Dean, Undergraduate Studies


## Yikes! Grad Photos Already?

Hi all!
Well, after a harrowing month of hard work and begging for volunteers, it looks as though MGC ' 97 is finally truly underway.

## Pizza Buttons Are In!

We have already had three scrumptious MGC Pizza Days, and the trend shall continue! Pizza and pop will be on sale every Wednesday between 11:00 and 1:00 in front of the C\&D (That's the "Right Angle Café"). Prices are very reasonable, and even better if you buy your very own MGC '97 Pizza Button! These beautifully-crafted buttons are available for pick-up from your friendly neighbourhood MGC volunteer. Pick them up on Pizza Day or in MC 3029.

## Ice Cream in Summer... Who Could Ask for Anything More?

Math's very own ice-cream bar, "Conics," has now opened in the C\&D (Right Angle Café). Some hot, gooey day this summer, as you savour a fabulous Conics ice cream cone, remember to thank the Math Graduating Class of 1996 for their donation toward this project!

## Group Photo:

Tuesday, June 4th at 4:00 in front of MC!
As you read this issue, Grad Photos are on-going in Federation Hall. The photo-shoots started on Wednesday, May $29^{t h}$, and will continue until Tuesday, June $4^{\text {th }}$ (this Tuesday!). If you haven't already done so, you may still sign up. Do it now!!

On the topic of photos, a group photo of all Class of 1997 students on campus this term will take place on Tuesday, June $4^{\text {th }}$ (this Tuesday!) at $4: 00$ on the outside stairs of MC (by the the big blue sculpture). Please be there! In case of rain, the photo will be postponed to Wednesday, June $5^{\text {th }}$ at 4:30.

## An Apology. .

We apologize that the scheduled MGC '97 Softball Game and Barbecue had to be cancelled last Thursday on account of rain. More social events are to come - keep your eyes peeled for posters, and read uw.math.mgc!

## We Still Need Help!

We still need volunteers for MGC Pizza Days and office hours. We also need
a) A Merchandise Director
b) A Pink Tie Pledge Director
c) An MGC Webmaster

Will all Mathies planning to graduate in 1997 please email your userid to mgcQundergrad.math with the word "userid" as the subject?

Andre Chang \& Debra Richardson (your MGC '97 chairbeings)

## ANEA/ASNA Update

Remember that nice Actuarial Students' National Association? Well, there were elections in March for a new crew and so here are your 5 delegates:

- Raman Srivastava
- Joanne Phoa
- Lynda Jeffs
- Kevin Moniz
- Chantal Bray

Of these, I am the only one here this summer. You'll also be happy to know that the Presidency has come back to U of W with me!

Our main goal this year is to incorporate Simon Fraser University, the University of Manitoba, and the University of Calgary. These universities have shown interest to join us and we are happy to expand to the west.

Should you have any questions, comments, concerns, please contact me.

Chantal Bray, ANEA/ASNA President<br>cbray@undergrad.math



## mathNEWS BBQ

Burgers for a buck!
Watch for a mathNEWS BBQ in front of MC every Thursday, from 11:30-1:00. You can get a delicious, mouth-watering hamburger for only $\$ 1$, and a pop for a mere $50 \$$.
Come on out and support mathNEWS!

> Warren "The Milkman" Hagey

## Orientation Positions Available

There are a limited number of positions still available for female orientation leaders for Orientation '96.

If you are interested in applying for a position, please come to MathSoc at 4:30 on Wednesday June $5^{t h}$. Be prepared to answer questions about why you want to be an orientation leader, and what your relevant experience is. It is not expected that there will be room to accept all applicants, but I encourage all interested persons to apply.

Please tell your friends about this opportunity.
Christina

## The Oracle Speaks!

Note: The mathNEWS Oracle is all knowing and all seeing, but is also all busy. We are very fortunate to have said entity with us, but if no one asks any questions, then the Oracle will not answer any.
The responses of the the mathNEWS Oracle are given by a trained professional, and should not be attempted at home. And as always, please, no wagering.

```
> From dale@stones.co.za Mon May 20 03:53:23 1996
> How can I make the best possible investments
> in South Africa?
```

First off, I should say that to make good investments, one should ideally have a sound knowledge of all things financial. While everyone cannot be omniscient, as I am, it is still possible to become adequate to the task. Naturally, I could easily give suggestions that would give you a nine hundred or more percent gain on your investments, but by the time you read this article, that chance would have gone. The next best time to make an investment will be at exactly $2: 14 \mathrm{pm}$, in the year 2014. (That's Greenwich Mean time, BTW)
Developing a sound financial mind requires about five years of training in a good accounting school, plus another two or three years in a CA program. All this will cost you a mere $\$ 32,000$ or so, after which you'll need a good chunk of capital to invest wisely. I recommend investing in local dictators and promising them funding in exchange for control of all the country's diamond mines when they come into power.

Remember, as your advisor, I get a fifty percent cut.
The Oracle

## PMC Stuff

The Pure Math Club is already into the swing of a great term, and there are still lots of wonderful things yet to come. Remember that it's not too late to get your very own PMC membership for a mere $\$ 2$. Membership entitles you to use of the terminals, lending privileges from the PMC library, a discount on pop, and much, much more. Drop by the PMC in MC 3033 and see how much fun math can really be.

In other PMC news, the PMC soccer team played its first game on May 22, but alas, the heroic team lost a $4-0$ nailbiter. However, with a bit more practice and some fanatical cheerleading, we just might win one this term.

Another exciting event that the PMC puts on are talks on mathematical subjects. The following talks are already scheduled, and more will be coming later in the term:

- May 30 - Marek Stastna - topic to be announced
- June 6 - Troy Vasiga - Cryptography
- June 13 - Prof. Sue Campbell - Dynamical Systems
- June 20 - Prof. J. Baker - Functional Equations

All of these talks are on Thursday afternoons at $4: 30$. Watch for posters around MC for the exact room of the talks, and come out for interesting information and free refreshments.

Eat. Drink. Sleep. MATH!
Warren "The Milkman" Hagey

## When Is Fish Good?

A talk by Dr. Charmaine Dean, Biostatistician, University of Washington

## Abstract:

The Poisson model is an important distribution used in the analysis of data arising as counts. A major assumption underlying the use of this model is that the variance of the distribution equals its mean. In practice, this assumption often fails, and the sampling variance is much larger than expected, a phenomenon known as overdispersion. This talk describes simple ways to check that the Poisson assumption is reasonable. It illustrates the use of Poisson-based models for describing the geographic distribution of infant deaths in British Columbia. Such distributions are usually presented as maps. They are used by health policy-makers to identify factors which may be linked with mortality, and to identify sub-populations which have elevated mortality rates, and hence require greater medical support.

Thursday, June $6^{\text {th }}, 1996$ 3:30 P.M. MC 5158 All students and faculty are welcome.
Presented by the Women in Mathematics Committee

## Seen On The mathNEWS Door

"Augh my brain! There's a fire in my brain! Get it out! Get it out! GET IT OUT!!! No, not my brain, you idiot, the fire!"

## The Return of Women of Mathematics

Once again this term I hope to motivate and enlighten you with the tales of women mathematicians. We begin this term's series on a positive note. The story of Olga Taussky-Todd is not one of discrimination and sexism, but of a brilliant woman whose life was filled with inspired mathematics, and wonderful collaborations. Taussky contributed to many areas of number theory and matrix theory, and did much fundamental work on Hilbert's $19^{\text {th }}$ problem on sums of squares.

Born Olga Taussky in 1906 in what was then Olmütz in the Austrian Hungarian Empire (now Olomouc Czechoslovakia), she grew in a family that had great respect for education. Her father was an industrial chemist who recognized her mathematical talent. He gave her math chores such as dilution problems, and posted her solutions in his factory.

She began her academic training in chemistry at the University of Vienna, where she studied under Hans Hahn (of the HahnBanach theorem fame), Karl Menger, and Philip Furtwängler. She began her research career with Furtwängler, working on David Hilbert's conjectures in class field theory. In 1930, at the age of 24 , she received her doctoral degree.

Based on this thesis she was invited to Gottingen to edit Hilbert's work. While at Gottingen she was kept busy with teaching duties. She was able to work with many mathematicians here, including Emmy Noether.

Political tensions arose around this time, and like many other Jewish intellectuals, she left Germany. She returned to Vienna briefly to work again with Hahn and Menger, and subsequently worked briefly at Bryn Mawr College. There she was reunited with Emmy Noether.
In 1935 she returned to Europe as part of a science fellowship. However, no one shared her interests at Girton College Cambridge. The female head of Girton college insisted that students avoid working under Taussky. In her opinion, it would be damaging to their career to have a woman supervisor. Two years later she succeeded in obtaining a junior level teaching position at Westfield College. It was there that she began a collaborative relationship with John Todd. They were married in 1938.

In 1943 Taussky took on a research position in aerodynamics with the Ministry of Aircraft production in the "Flutter Group" at the National Physical Laboratory. The problem reduced to stability problems of a certain matrix. It was there that Taussky developed interest in matrix theory. In 1947 she and her husband accepted positions at the National Bureau of Standards in the United States. During this time she wrote several papers and lectured at Caltech.

Olga and John both received an offer to join the faculty of Caltech in 1957. It was a standard situation at the time: The husband was offered a professorship and the wife a research assistantship, despite the fact that they had similar duties and equivalently sized offices. Here Olga conducted many seminars and supervised many theses. The Los Angeles Times proclaimed her woman of the year in 1964. An honour none of her (all male...) colleagues at the time ever managed. She was granted the Ford Prize for her paper "Sums of Squares" in 1970 and the following year, the honour of Professor Emeritus from CalTech.

The University of Vienna awarded her a Golden doctorate in 1980 for her achievements in research and in teaching. She carries the Gold Cross of Honour First Class of the Austrian

Republic and has been elected to both the Austrian and Bavarian Academies of Sciences.

Olga was known by her contemporaries as someone whose zest for mathematics was deeply rooted and contagious. She helped revitalize matrix theory (linear algebra), and began the foundation for the sums of squares problem. She did not face many of the barriers that earlier women faced, such as Emmy Noether who was only a generation before her. She had a supportive family and husband and eventually was granted a full professorship in a good school.

Her life came to an end just last year. There have been many rememberances commemorating her work since then. The mathematical world will surely miss Olga Taussky-Todd and her enthusiastic mathematics.

Marni Mishna
mjmishna@noether.math.uwaterloo.ca

## At SAC we ACT!

## Students Advising Co-op ready to tackle major issues

Summer's here! Time to sit and relax in the sun, and watch the clouds go by, right? No chance! Students Advising Co-op has a busy agenda for this term, and sun tanning isn't on the list!

As per usual, SAC will keep a close eye on the Co-op system and attempt to head off problems before they become major. On top of this proactive watch dog role, SAC will assist Co-op in investigating other issues.

The current discussion topic is work reports and their value to both students and employers. Many students have raised concerns that work reports have become just an added burden and question the validity of having to write a report which is, on the most part, a formality rather than a useful learning tool. In addition, there does not seem to be enough adequate feedback in terms of evaluation and the report does not accomplish required goals. Furthermore, there are restrictive formats and inconsistencies in marking across faculties. Finally, the work report marking fee and its appropriateness has become a concern.

In order to handle these matters, SAC is working together to compile and compare faculty requirements in terms of required work report elements. Hopefully this will give us a better perspective of the differences among faculty work reports and give us a starting point for a useful review. As well, actual learning experience from writing work reports is being discussed in terms of improving technical writing and research skills. The Associate Director of Programs will constitute as the main liaison for issues such as this between Co-op and SAC.

Other issues will come up during the term and we hope that if you have any concerns or items to discuss, that you will bring them to our attention. Come and check out what we do at our next meeting on Tuesday, June 4 at 5:30 in Needles Hall Room 1029 or visit us online at: http://www.undergrad.math.uwaterloo.ca/~sac/ and post your views to the newsgroup at: uw.coop.sac.

Amanda Woo

## prof QUOTES

"Ah, the chalk's cheap. Either that, or I'm strong today"
Hoffman, MATH 146
"You might have a hard time identifying with me, if I'm a bald man, and you're a very hairy woman."

Viminitz, PHIL 215
"It seems a requirement to work at McDonald's is to have really, really bad acne... Has anyone here worked at McDonald's? Oh, that's clearing up nicely now."

Viminitz, PHIL 215
"Consider some $x$ between 0 and 1. Say $x=1.5$."
Kolkiewicz, STAT 230
"It's easy to get lucky once you know how."
Buss, CS 340
"I'm blushing, so it's a good thing I wore red today."
Buss, CS 340
In a completelly filled room:
"How many people think it's a span?" (3 people raise their hands)
"How many people don't?" (3 other people raise their hands) "Okay, so I guess we're split here..."

Astels, MATH 136
"... linear independence, and this has nothing to do with Quebec."

Astels, MATH 136
"And the union of $S$ and $X \ldots$ hmm... that spells $S \cup X$. That just about sums up these proofs."

Astels, MATH 136
"I could have written anything down there, you guys are just so gullible."

Astels, MATH 136
"Everyone's going to have to be quiet because my voice sucks."
Astels, MATH 136
"I'm not going to be here on Friday, so you're going to get a substitute prof...no, not a real prof, I don't want to be upstaged, but another grad student, actually your TA, so if you give him a hard time he'll get even. So if you don't like him, don't worry, you'll have another one next Friday because I won't be here then, either."

Astels, MATH 136
"If we couldn't solve this, and no, that doesn't mean that we couldn't solve it because we stopped trying because Seinfeld was on..."

Astels, MATH 136
"Remember when you were six and had a lemonade stand? You had 2 cans of lemonade and had to buy 3 more. What's the total cost?" (long silence) "I know, you're six, it's a difficult concept..."

Allan, BUS 121
"Okay, this is a pretty boring lecture, what can I say?"
Willard, MATH 136
"What led to that contradiction? ...I erased it."
Willard, MATH 136
"Wouldn't life be easier if we self-fertilized?"
Welch, STAT 331
"Why do I always pick the rooms with the 'little chalk'?"
Van der Woude, MUSIC 140
"Now, suppose you have a second order ODE. Why not, they're pretty common, you go to the corner store, find one sitting on a shelf..."

Talvila, AM351
"We have a second solution, just like the first, a little bit louder and a little bit worse."

Talvila, AM351
"Something, zero, something. $(m, 0, m)$. Mother's Day was recently. How appropriate."

Dickey, PMATH 360

## Proof Filler

## Proof that Math does not really exist

- Math involves numbers
- Numbers are sometimes even
- When you get even, you get mean
- If you're mean to someone, you might get in a fight
- For fights, they use the word "versus"
- The short form of "versus" is VS
- An example of a VS is $\Re^{4}$
- $\Re^{4}$ has four dimensions
- Four dimensions don't really exist

Therefore, math doesn't really exist.
Carolyn "Gee, I forgot to print my name again" MacLeod Andrew "I forgot to print my name" Archibald

# ODE to a grecian urn 

$$
\frac{d^{2} x}{d t^{2}}+\sin x=\cos t
$$

## vapidFIRE

All the news printed to fit
A new women's prison in Edmonton was shut down by SolicitorGeneral Herb Gray after seven of the twenty-eight inmates (that's one out of four for you statistics people) escaped in a period of less than three weeks. At least three of the women that escaped had been convicted of homicide and robbery. All but five of the twenty-eight inmates were transferred to the Edmonton Remand Centre until new security measures are installed. (The remaining five, presumably, were allowed to remain there after they repeated the oath, "I solemnly swear that I will never, ever escape from this prison. Cross my heart and hope to die, stick a needle in my eye.") The new security measures are purported to include: replacing the current security fence with one taller than 30 centimetres; giving night guards powerful flashlights instead of Timex Indiglo ${ }^{T M}$ watches; and no longer allowing inmates to give the guards "wedgies" as a reward for good behaviour.

Bill C-33, which adds the words "sexual orientation" as a prohibited ground of discrimination in the Canadian Human Rights Act, was passed in a $153-76$ free vote in the House of Commons, a 2-1 margin. Opposing the bill were 28 Liberal MPs, two independent MPs, one Conservative MP, and all but one Reform MP. Roseanne Skoke, Liberal MP for Central Nova, was quoted as saying, "We're asking Canadians to condone and accept homosexuality as natural and moral. It's my position that it is unnatural and it is immoral." Reform Party leader Preston Manning, who had suspended two Reform MPs from his caucus for saying it was okay for employers to discriminate against homosexuals if their presence offended bigoted customers, reportedly later contacted Skoke, saying, "Thanks for drawing the heat away from the Reform Party; it's nice to be reminded that the Liberals can be counted on to cover up the indiscretion of other political parties with its own!"

Finally, senior officials of the Ontario Ministry of the AttorneyGeneral are fine-tuning a sweeping plan to restructure Ontario's justice system, reports the Toronto Star. This plan divides criminal charges laid by police into three categories: the top category would be reserved for serious crimes of violence, including sexual assault; the second category would be reserved for impaired driving; the third would include all other charges. All charges would be screened by provincial prosecutors; charges from the first two categories would go to court if prosecutors judge there to be a "reasonable prospect" of conviction, while charges from the third category would go to court only if there were a "substantial likelihood" of conviction. Said a representative, "This way, we can save government money currently being wasted on an unreasonable pursuit of 'justice'. If we keep these types of cuts, eventually our justice system won't cost us a cent, and it will be worth every penny!"

Mike "This Hammer Has 22 Minutes" Hammond

## Summer Recipes for Students

or How to Open the Box and Microwave

Well, now that the summer weather is really here, let's talk about something that's important to everyone: Food! I thought that I'd ask my roommate for some hints for quick summer meals. I'll call him Dave, not because I want to protect his innocence, but because that's really his name.

We started off with breakfast. Dave suggests that we keep things simple, yet provide a good dietary source of carbohydrates: Kellogg's Pop Tarts ${ }^{T M}$. They're quick, they're easy, and they have one important characteristic: no dishes required. He suggests that if you have the chocolate flavour you should have something to drink, though, since they taste pretty gross.

Next was lunch. Dave thought that we'd be a little creative today. We started with a toasted bun, and added ranch salad dressing, lettuce and tuna. You're probably thinking that this sounds pretty good so far, but you haven't added "la pièce de résistance ": the cherry glaze, spread over the bun. This provides you with all four food groups in bite-sized chunks. Perfect! This requires only one utensil - a knife to spread the dressing and glaze.

For dinner, we felt that a little variety was in order. Dave went through the freezer to see what he had, and came out with an assortment of Schneiders ${ }^{T M}$, Maple Leaf ${ }^{T M}$, Oscar Mayer ${ }^{T M}$, and McCain ${ }^{T M}$ products - staples of the student diet. Fortunately, we could cook everything in the deep-fryer at one time. A little bit of plum sauce for the breaded chicken nuggets, and we'd satisfied all four food groups again. "After all," Dave says, "french fries are a vegetable." The only thing that needs cleaning when you're finished is the plate you eat off. Dave insists that the deep-fryer should not be cleaned, since that would detract from the flavour of future meals.
"It's important that you purchase foods that don't go bad during the summer," Dave says. "That's why everything I buy is either frozen, or has so much chemical preservatives that the shelf half-life is longer than the half-life for Uranium ${ }^{T M}$. There is no point in buying fresh fruit or vegetables, since they go off so quickly during the summer heat. Also, they are quickly digested by the other things growing in the bottom of the refrigerator."

So there you have it, simple summer meals from Dave. Enjoy!


## mathNEWSquiz \#2

Expund your horizons

Hi, this Squiz is a touch heavy on Greg's favourite TV shows, since I abandoned him for a visit to Montreal this weekend...but enough about that. We have a sum total of seven entries for last week's squiz, and the answers are ... Song Lyrics: 1) Who Wants to Live Forever/Queen, 2) Man on the Moon/REM, and 3) I am the Very Model of a Modern Major General/Gilbert and Sullivan and a whole mess of actors ... Old TV: 1) Ralph Hinkley, 2) Knight Industries 2000, and 3) Brain/Penny ... Capital Cities: 1) Romania, 2) Lithuania, 3) Albania, and 4) Jordan.
Like I said, we had seven entries for the squiz this week, with the number of correct answers we have Greg Morey \& Golan Schwartz(2); Reza Shahidi(4); Order of the Flying Dagger(6); John Swan(9); Bryan Las(10); Margaret Milne(12); and the winner, with all 13 answers is Live From Mississauga ... HAMMER!! I'm not sure what good it is to a grad, but he wins a voucher for the C\&D. [The said Grad will be back in September to enjoy the pleasures of the CGD-CrakkoEd]

## Sailor Mercury

1. What is Ami Mizuno's favourite subject?
2. How is the "Shabon Spray Freezing" attack dubbed by DIC?
3. What new attack does she acquire in (Sailor Moon SS) Japanese episode 151 ?
4. What is the title of the dubbed episode where Amy indicates her last name may be "Anderson"?
5. Who is Sailor Mercury imprisoned in a mirror with in (the SM Stars) episode 170 ?

## Sliders

1. What is the real name of the "Crying man"?
2. What is the name of Quinn Mallory's Cat?
3. What second season episode featured a world similar to their Earth Prime, but with the "Azure Gate Bridge"?

## Quebec Premiers

1. Which Quebec Premier resigned after losing a referendum, and which one didn't?
2. Which Premier said "Of all the white races, Quebec women have the lowest birthrate."
3. Who was the premier during the October Crisis?
4. Who was the Premier who served the longest term?

Good luck to everyone, and be sure to slide answers into the BLACK BOX or email to chmacleo@undergrad.math or gbtaylor@undergrad.math by 3p.m. on Monday, June $11^{\text {th }}$ to win a lovely C\&D voucher.

Carolyn \& Greg

## If You Find The PC-Mac Lab Key

Kindly Return It To MathSoc
You Can't Use The Lab Without The Key To Get In

## gridCOMMENTS

## "Brandy Induces Googolplexes of Fun $\S$ Chaos"

We received seventeen submissions to Spring 1996's first gridWord, and fifteen of them were correct. The correct entries were submitted by Andrew Archibald \& Carolyn MacLeod, Chris Ingram, Des Cartier, Winston Ng, Reza Shahidi, Jon Roegele, Shafinaz Syed \& Martin Ritchie, Robert Oliver \& Rafael Van Dadetunt, Greg Morey \& Colin Schwartz, Trevor Bruen, Will John, Andrew Martinez, Devon Groen, Mike Hammond and "The Order of the Flying Dagger". Robert Haynes and "Mother Goose \& Grim" also submitted solutions, but were off by one letter.

The winners, Greg Morey \& Colan Schwartz receive a gift certificate of an undisclosed amount for the Right Angle Cafe. (The letters C \& D have moved on and are now proud sponsors of Sesame Street, along with the number 10.) Greg and Colan also came up with many possible acronyms for the pseudo-word "BIGFC". Among my favourites are Bran Is Good For Children and Bullets Inside Guns Foster Carnage.

This gave me an idea. For the rest of the summer, each gridWord will contain a non-word, which will be clued as "Mystery Acronym", and you will have to figure it out using perpendicular words. When you do figure it out, think of a good phrase that the mystery acronym could stand for, and submit that with your entry. When we choose the winner, in the event of a tie, the winner will be the one who has the funniest or most creative phrase that fits the mystery acronym.

A couple of notes about the previous gridWord. The clue for "ARIAL" should have referred to the font arial, not the mermaid Ariel. Also, being "KNEED" doesn't necessarily mean you are being kicked in the groin, and caves are not tunnels and tunnels are not caves.

Finally, I received a few notes about the easiness of the last gridWord. I tried to make this one a little more challenging. Be sure to submit your solution by Monday, June 10 at 3pm. You can place your solution in the BLACK BOX or through email at csevern@undergrad.math. Good luck!

| H | A | C | K |  | W | R | E | N |  | B | A | S | I | C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| U | L | A | N |  | H | A | T | E |  | A | R | I | N | K |
| M | 0 | R | E |  | E | C | H | 0 |  | B | I | G | F | C |
| A | N | T | E |  | R | I | 0 | T |  | Y | A | H | 0 | 0 |
| N | E | E | D | L | E | S | S | H | H E | L | L |  |  |  |
|  |  |  |  | 1 | A | M |  | U |  | O |  | F | R | I |
| C | A | N | 0 | N | S |  | A | G | G E | N | C |  | E | S |
| A | D | 0 | B | E |  | C | B | S | S | F | 1 | N | A | L |
| V | A | R | I | A | B | L | E |  | R | R I | D | D | L | E |
| E | M | M |  | R |  | U |  | R | R E | V |  |  |  |  |
|  |  |  | D | O | D | E | C | A | H | E | D | R | O | N |
| R | E | S | I | P |  | L | A | T | T E |  | R | A | R | E |
| 0 | V | I | N | E |  | E | M | M | 1 A | A | E | B | B | S |
| 0 | I | L | E | R |  | S | E | E A | A T |  | A | B | 1 | T |
| F | L | O | R | A |  | S | 0 | N | N S |  | M |  | T | S |

## Habitat for Humanity

## The happy combination of constructive destruction

Well, they actually build stuff too.
If you have a free afternoon from time to time, why not consider using it for something other than reading news or websurfing? Habitat for Humanity is a charitable group which helps out needy families by building a home for them. The lot and some materials are donated by the municipal government and businesses, but a lot of stuff comes from buildings that are going to be knocked down, which volunteers raid for all the good stuff.

Last term, I helped disassemble a demo home for a failed subdivision project in Cambridge. It was great! We got lots of doors, windows, frames, light fixtures, etc.
By volunteering, you get to wield a hammer, a screwdriver, or any other tool of your choice to help someone you don't know. It's a great feeling! If you try real hard, you get to bolster your falling-off-ladders skill like I did.
If you're interested in volunteering or just finding out more, email sdmorton@artsu2.uwaterloo.ca

Stephen van Egmond

## We need your help <br> in the Creative Department...



## Movies and Social Commentary

I bought Natural Born Killers the other day, and after watching it I started thinking about the "Social Commentary" movies that have come to the theatres over the last several years. I'm talking about the kind of movies that get better and better every time that you see them. These are movies that can generate hours of discussion as you try to determine what the movie producers and directors intended to convey to the audience.

Natural Born Killers is clearly a reflection on the power of the media; a look at the insatiable thirst by the public for violence, sex, and high intensity drama. It parodies the television news report and sitcoms - totally removed from reality, yet able to tell a life story between commercials. At what point does media hype start to destroy the social fabric? Is it correct to explain criminals as products of dysfunctional families, or are they a result of an uncaring society that places higher ratings on violence than information?

On the surface, a complex movie about the mind of a psychotic serial killer, Seven has much deeper social meanings. Most obvious is that the "seven deadly sins" are committed not by a single person, but by society in general. The movie also hints at social decay of cities, with increasing crime and poor living conditions. Are psychopaths an aberration, or a result of disease within society itself?

Other movies examine the use and exploitation of technology in today's society. Jurassic Park or 12 Monkeys ask us to examine the possible side effects of bio-technology research. In Strange Days we look at the future virtual reality - and some of the social problems that it can produce. Imagine that you could "jack-in" to the rush of skydiving, the success of a baby's first step - or an act of extreme pornography. At what point does technology begin to harm society? What limits should we place on technology, and how can we control it?

Movies depicting violence are not the only movies that question the values of today's society. Think of Nell, a movie about society's need to exploit the unknown; the need to convert those that are different so that they conform to society's norms. Are these needs more important than an individual's desire for selfdetermination? The Piano raises questions about power, domination, sexuality, and love.
These movies beg the question: When will a movie come out that examines a society that looks to solve its problems by watching social commentary films?

Stephen "Pepper" Johnston

## BombShelter Golf Tournament

The BombShelter is having a golf tournament on Thursday, June $20^{\text {th }}$ !

The entry fee is $\$ 40$ and includes:

- transportation to and from the golf course
- steak dinner

For more information and to sign up, go to the BombShelter in the SLC.

## Bridge Psychology

| Vul: Both | North |  |
| :---: | :---: | :---: |
| Dealer: N | - J 10 |  |
|  | $\bigcirc$ K J 10762 |  |
| West | $\diamond$ Q 853 | East |
| - 97 | \& 9 | A A 52 |
| $\bigcirc 843$ |  | $\bigcirc$ AQ95 |
| $\diamond$ K 10942 | South | $\diamond$ A J 76 |
| \& J 43 | わ KQ 8643 | \& 85 |
|  | $\bigcirc$ Void |  |
|  | $\diamond$ Void |  |
|  | \& AK Q 10762 |  |
| North | East South | West |
| 20 | 2 NT 6\% | Pass |
| Pass | Dbl. All pass |  |

This hand occured in a recent Ottawa tournament. Three of the hands are normal, boring everyday hands. The person sitting south was close to a heart attack looking at a sea of black, with high cards. The two no-trump bid by east showed $16-19$ points with hearts stopped. South paused for nearly a minute before producing his master bid. There is no way to investigate any reasonable contract, so he just bid the one that looked best.

Now East came in with a well thought out double. He had three aces. There was no way that he could avoid taking two of them. Clearly South was an idiot for bidding that high.
Looking at the hands you can see that it was in fact East who was a little crazy. Two of the three aces were going to be wasted as south could trump them.
At this point psychology took over. West led a spade, because there was nothing better to do and East won and returned a spade to the dummy. South began to think. East doubled a contract that could only go down if there was a trump loser. East probably wasn't that stupid, so he must have a trump trick to take. Having reasoned all of this out, South played the club from dummy and finessed the ten. West was a little surprised to win the trick but it still counted.

So, you can judge. Who is the crazy one? East made a silly penalty double, but it convinced South to take a silly finesse. Decide for yourself.

## Now Playing

Surprise, surprise. Here's a movie I didn't like.

## Spy Hard

70 -year-old Canadian Leslie Nielsen stars as WD-40, the ultimate government agent, in this film which spoofs the James Bond flicks, Cliffhanger, Speed, True Lies, and many more. Unfortunately, the zany gags, many of which you see already in the commercials, aren't really funny. It was nice to see Andy Griffith as the evil General Rancor, but about the only redeeming quality of Spy Hard was the opening title sequence performed by "Weird Al" Yankovic.

Warren "The Movie Milkman" Hagey


Jared Riley




|  |  |  |  |  | 25 |  |  |  | 26 | 27 | 28 | 29 | 30 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31 | 32 | 33 | 34 |  |  |  | 35 |  |  |  |  |  |  |
| 36 |  |  |  |  |  |  |  |  | 37 |  |  |  |  |
| 38 |  |  |  |  | 39 |  | 40 |  |  |  |  |  |  |
| 41 |  |  |  |  | 42 | 43 |  |  |  |  |  |  |  |
|  |  |  |  | 44 |  |  |  | 45 |  | 46 | 47 | 48 | 49 |
| 50 | 51 | 52 | 53 |  | 54 |  |  |  |  | 55 |  |  |  |
| 56 |  |  |  |  | 57 |  |  |  |  | 58 |  |  |  |
| 59 |  |  |  |  | 60 |  |  |  |  | 61 |  |  |  |
| 62 |  |  |  |  | 63 |  |  |  |  | 64 |  |  |  |

## Grid Clues

## Across

1. Personal ad text
2. Big dumb guys
3. Rewrite for the screen
4. Exhuasted expression
5. Coin action
6. Singer type
7. They don't make this flavor of Crush anymore
8. Dazy or hazy?
9. Photograph
10. Wile Coyote's favorite company
11. A female name missing a " T "
12. A type of code
13. 1996 SPRING MOVIE
14. Anagram of US's Tax Dept.
15. Pulp Fiction line: "Now that's a $\qquad$ burger."
16. 1996 SUMMER MOVIE
17. What you could call all these new 3D-perspective action games ( 2 wds )
18. More slippy
19. Asian donkey (check the dictionary)
20. Undercover drug cop
21. 1996 SUMMER MOVIE
22. Understood
23. Halifax Stock Exchange (Abbr.)
24. 1996 SUMMER MOVIE
25. Rear end of boat
26. ST:TNG episode:
"Sub ."
27. Naked
28. Mountainside nest
29. $\qquad$ Nixon
30. Might be the baby's first word
31. If it was broken, it would be a 1996 SPRING MOVIE
32. C Interpreter (ShortForm)
33. Financial minister Ernie --
34. Evaluations
35. A cage in Mortal Kombat?
36. Pointy sport

## Down

1. Sound Hans Gruber makes at end of Die Hard
2. What one?
3. Movie: "La $\qquad$ Nikita"
4. Nerd
5. You want one in co-op
6. Disney movie
7. Phonetic spelling of one of the sciences
8. 1996 SUMMER MOVIE
9. 1996 SUMMER MOVIE
10. Sample
11. Prefix before "chy" and "chist"
12. Bottlecap items
13. You'll find one in front of the math building
14. Official campus paper ( 2 wds )
15. French friends
16. One of the math course codes
17. Musical sound
18. Mystery Acronym!
19. You get one in your neck
20. Phrase: "I think .-.-" (2 wds)
21. Robert De $\qquad$
22. General Electric Canadian Wing (Abbr.)
23. 1996 SUMMER MOVIE
24. Hair style method
25. One of the five banks
26. Roasting procedure
27. Finished
28. A fruit tree
29. Cow part
30. Bread ingredient
31. Stool
32. British spelling of a car part
33. Mistakes


