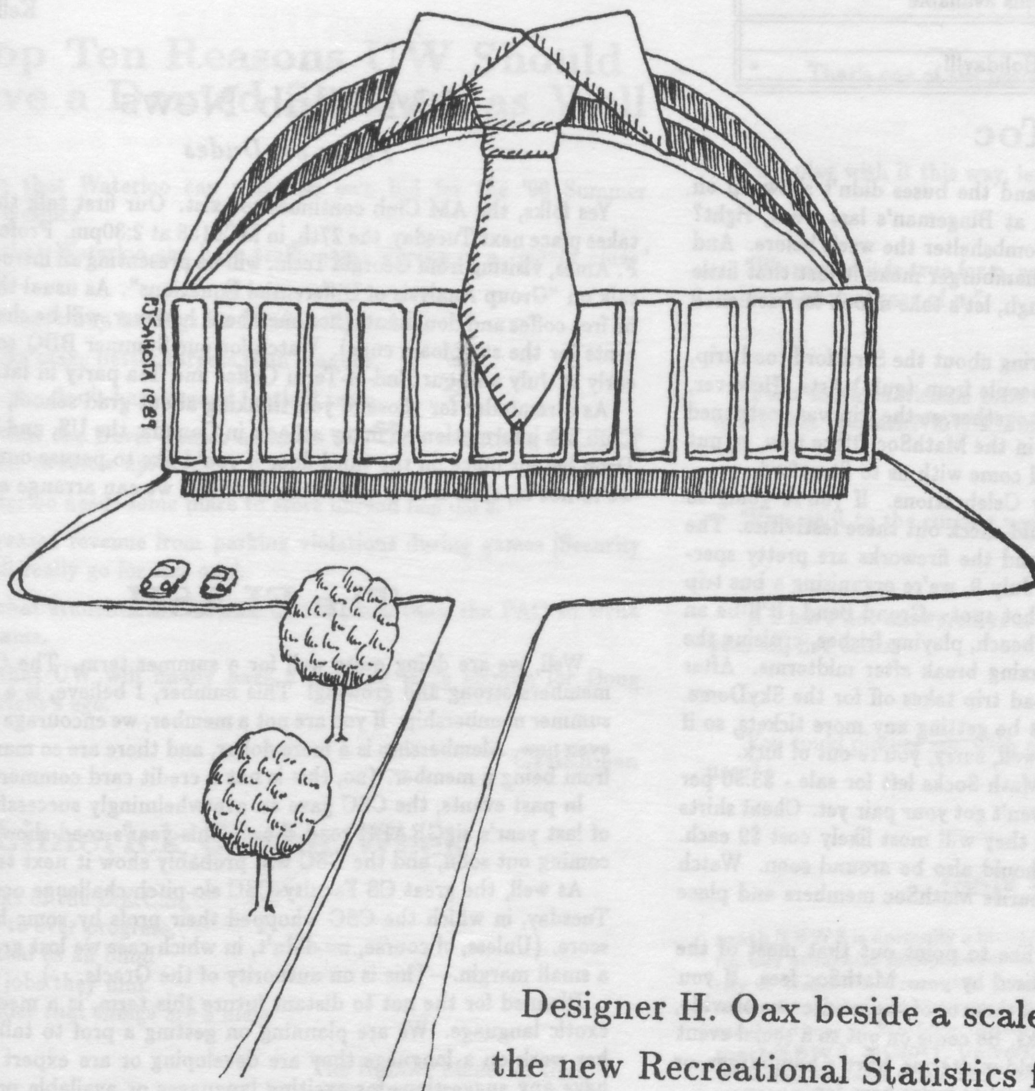


math NEWS

Volume 50 Number 3

Friday, June 23, 1989

New Math Building Proposed; To Be Called The TieDome!



Designer H. Oax beside a scale model of
the new Recreational Statistics facility.

LookAhead

mathNEWS	
July 10,24	production nights
July 14	Issue #4 hits the stands
MathSoc	
June 21	BBQ on front porch
July 9	Grand Bend Excursion
July 14	Blue Jays Road Trip
Cinema Gratis	
June 27	A Likely Story
	The Man Who Would Be King
July 4	The Great Train Robbery
	Labyrinth
July 11	The Tender Tale of Cinderella Penguin
	Cat Ballou
July 18	Excalibur
	Highlander
Fed Flicks	
	Phys145 at 8 pm
June 23,24,25	Shoot to Kill
June 30,31,32	Stand and Deliver
July 7,8,9	Frantic
July 14,15,16	The Dead Pool
Co-op	
June 29	Ranking forms available
Math Faculty	
July 3	University Holiday!!!

Soc Toc

Okay, so there wasn't much sun and the buses didn't show up on time, we still managed to have fun at Bingeman's last week, right? Almost as much as we had at the Bombshelter the week before. And doesn't having your prof cook your hamburger make it just that little bit tastier? Enough of the past, though, let's take a look forward shall we?

For those of you that were wondering about the Stratford road trip, we were planning to go with some people from (gulp) Arts. However, they've just recently gotten their act together, so the trip was postponed to July 6. Tickets should be on sale in the MathSoc Office now, so put a little culture in your social life and come with us to Stratford.

Also coming up are Canada Day Celebrations. If you're going to be around K-W on July 1, you should check out these festivities. The events are fun, the food is cheap, and the fireworks are pretty spectacular. The following weekend, on July 9, we're organising a bus trip to Southwestern Ontario's summer hot spot—Grand Bend. It'll be an afternoon/evening of sitting on the beach, playing frisbee, cruising the strip, and bar-hopping—a nice relaxing break after midterms. After that, the long-awaited Blue Jays road trip takes off for the SkyDome. We are sold out now and we won't be getting any more tickets, so if your name was on the waiting list, well, sorry, you're out of luck.

We still have bags (literally) of Math Socks left for sale - \$3.50 per pair in the MathSoc office if you haven't got your pair yet. Cheat shirts should be in within two weeks and they will most likely cost \$9 each. Summer '89 tie-dyed term shirts should also be around soon. Watch for them on the backs of your favourite MathSoc members and place your orders in the MathSoc Office.

As a final note, we would just like to point out that most of the events we run this term are subsidised by your MathSoc fees. If you don't come out and take advantage of them or of the services we provide, you're missing out on your five bucks. So come on out to a social event or two (or more), photocopy some old midterms, have a hamburger, or just staple your assignments. That's what we're here for.

Tom, Anne, and Peter

'90 GRADS

Hi! There's lots to tell you so here we go!

Fundraising support has been great! Keep it up! The next pizza day, in support of your Math Grad Ball, is Monday, June 26. Also, a raffle for a CD player will be drawn on July 25 at Fed Hall. Tickets are \$2 each and will go on sale this week.

Our first social event, held at Heuther's, was a big success. Thanks for coming out! The next event is a bus trip to Wonderland on Wednesday, June 28. Tickets are \$20 each, which includes transportation and admission. The bus departs at 9:30am sharp from the M&C loading dock. Get a ticket & join the fun. Be alert for ticket sales for a Blue Jays game in mid-July.

Congratulations go out to Don Lee, whose art submission will be used for grad shirts. Shirts will be on sale in approximately 3 weeks.

Math Grad Rings will be on sale next week, June 26-29. Rings will be distributed during the last week of July. A price list, ring sizer, and sample ring will be available when you order.

The Yearbook Committee is looking for photos from the past 4 years. If you have a photo, please leave it with your name and ID number in the MathSoc office. You can get your photos back at convocation in May.

That's all for now. Look for more info in the next mathNEWS. In the meantime, come out and join other Math grads at fundraisers and social events.

Kelly Start
MGC

AM Club News

Party on Dudes

Yes folks, the AM Club continues to exist. Our first talk this term takes place next Tuesday, the 27th, in MC5158 at 2:30pm. Professor W. F. Ames, visiting from Georgia Tech., will be presenting an introductory talk on "Group Analysis of Differential Equations". As usual there will be free coffee and doughnuts (non-members, however, will be charged 25 cents for the styrofoam cups). Watch for our Summer BBQ sometime early in July and our End-of-Term Coffee and Tea party in late July.

As a reminder for those of you thinking about grad school, the AM Club has information on many schools in Canada, the US, and Europe. Drop by our office on the third floor if you'd like to peruse our files. If we're not in, slide a note under the door and we can arrange a time.

crash

The FLASH

Well, we are doing quite well for a summer term. The CSC is 118 members strong and growing! This number, I believe, is a record for summer membership. If you are not a member, we encourage you to join even now. Membership is a mere dollar, and there are so many benefits from being a member. (no, this is not a credit card commercial...)

In past events, the CSC gave an overwhelmingly successful showing of last year's sigGRAPH road show. This year's road show should be coming out soon, and the CSC will probably show it next term.

As well, the great CS Faculty-CSC slo-pitch challenge occurred last Tuesday, in which the CSC whopped their profs by some humungous score. (Unless, of course, we didn't, in which case we lost gracefully by a small margin.—This is on authority of the Oracle...)

Planned for the not to distant future this term, is a meeting on an exotic language. We are planning on getting a prof to talk on his or her work on a language they are developing or are expert in. If you have any suggestions for exciting languages or available profs, please tell someone in the exec or mail to cscmath

Calum

edLINES

Does UW really need a dome?

Proponents of a domed stadium for UW have argued that without it, Waterloo will be forever doomed to a second class status among the Universities of the world. In the humble opinion of this author, there are several questions that proponents of the dome have failed to address.

Foremost is the question of cost. Have the alternatives to simply plunking down a couple hundred million been examined? Why not just add 'domed stadium' to the next scavenger hunt list? We could just pick the nicest one that the engineers bring back. Admittedly Toronto might complain if theirs was stolen, but they've got lots of buildings so who would miss it?

Another major question that has yet to be answered by anyone is what a Waterloo dome should look like. How to incorporate another building into the delicate architectural ambiance created by the planners of this university is a complex question. Clearly we must be careful that it not clash with the subtle colours in our newer buildings.

Clearly the originators of the dome plan have much work to do before we should even consider such a project. Hopefully the voice of reason will prevail, as it does so often in the affairs of this great university of ours.

crash

Top Ten Reasons UW Should Have a Domed Stadium as Well

10. So that Waterloo can make its own bid for the '96 Summer Olympics.
9. So that Waterloo can have traffic jams worthy of a 'world class' city.
8. You can't buy hotdogs for \$6.50 in Waterloo.
7. Ducks make better targets than seagulls.
6. We also don't have a good football team.
5. So that the Davis Centre architect will have something REALLY BIG to screw up.
4. Waterloo needs some place to store unread Imp'tint's.
3. Increased revenue from parking violations during games [Security will really go for this one].
2. So that students will have a better place than the PAC to write exams.
1. So that UW will finally have a building large enough for Doug Wright's ego.

CYBERman

Limerick of the Week

The folks of the C.E.C.S.,
Unable to ever progress,
They steal us all blind
But no jobs they find.
No wonder that things are a mess.

The Rubber Mallet of God,
The Pitchfork from Hell,
and The Lascivious Limerick Llama from Limbo

Prof Quotes

What you said they said ...

Things were pretty slow this week for prof quote submissions. For that matter, submissions in general were pretty scarce. I won't complain too much though, I know you're all busy writing midterms and recovering from them, and that next issue I'll be completely inundated by submissions (hint, hint). As always submit your quotes, with the Prof's name and course, in the BLACK BOX across from the Comfy Lounge on the 3rd Floor or under the mathNEWS (MC3041) door.

"Don't insult 1; it can't help it if it's its own square."

Cultler, STAT 231

"Whenever I see a variable, such as X, I like to substitute a number, such as A."

Berman, MATH 130 A

"Let's give two proofs: one common sense, one mathematical."

McKiernan, AM 362

"If I wrote down $1+1=2$, would you write it down? Yes, you probably would."

Woolner, PHYS 122

"... That's one of the more complicated ways of writing down 1."

Colbourn, MATH 134B

"If I play with it this way, let's see how hard it gets."

Berman, MATH 130A

"We proved it is true for n, so it is easy to show if for n+1, since n+1 is just a special case of n."

Cutler, STAT 333

"Pure mathematicians have wet dreams over this stuff ... don't quote that in mathNEWS; I'm in enough trouble already."

McGee, MATH 130B

"Process it to the current year - 1990, or whatever it is."

Bakos, SCI 238

"If I have not answered your question in 20 minutes, then I'll give you, uh, five cents."

McGee, MATH 130B

"You could picture me, with a pump, forcing water up an elephant's nose"

Woolner, PHYS 122

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Editor: Stephen A. Smith

To the Editor

Dear mathNEWS,

I love your *Integer of the Week* feature in your publication, but I have a problem. Since mathNEWS is only every 3 weeks, the *Integer of the Week* must last for 3, and my Algebra T.A. is getting suspicious that the last 3 assignments I handed in have all been the answer "23", and he thinks I just resubmitted the same assignment 3 times.

So I urge you, for the sake of all of us faithful *Integer of the Week* users, please supply us with 3 integers, and we can all get perfect on our assignments!

Ziggy,
lover of integers

Thanks for the letter. Believe it or not, yours is the first letter that I have received as editor. It's nice to know that someone out there is reading us.

As you have taken the time to write us, we have invested some of the vast resources of mathnews talent to find more integers for you. I hope you are satisfied.

THE ED

Policy Leak

From reliable sources, MathNews has obtained the following secret document from the CS department:

CS assignment policies

For Staff use only

- Explicitly ask for simple and short algorithms. However, ensure that the test programs and driver routines are at least twice as long as the required algorithm, and orders of magnitude more complicated. Make no mention of this extra code in the assignment. This would make the assignment appear unfairly long. Simply ask for the algorithm to be thoroughly tested. Let the student find out what this involves—remember University is a place for learning.
- Documentation: Do not dispel the aura of mystery which surrounds this part of the assignment. Assure students you will instruct them when to provide documentation. Never mention the matter again. Give the impression that a full-fledged manual is required for even the smallest assignment question. Typically, students will panic, and produce documentation until their hands hurt. This is a good work-out, so you shouldn't feel bad. You may also wish to point out, when the assignments have been handed in, that all this paper will surely kill Canadian forests. A guilt-ridden student pays more attention in class.
- Ensure that the marking scheme contains some obscure points, so that no student will obtain perfect marks. Research shows that students will, on average, only spend 20 hours on a CS assignment. Such a small commitment must not be rewarded with high grades. Give a list of specific items to be included in the output. Allocate marks for items which are NOT on this list.
- Advanced mathematics form the basis for interesting numerical analysis algorithms. Your students may not be familiar with the concepts, so you may wish to give a brief (very brief) explanation on the assignment hand-out. A more detailed explanation may be given in class, after the assignment due date.
- Do not waste your time wording the questions. Invent your own terminology or change conventional definitions to suit your needs. The student can figure the question out for him/herself. Remember, University is a place for learning. Note: this rule applies to midterms too.

GRIPE

Indy's Back - With his Dad

Indiana Jones and the Last Crusade is the latest, and what Spielberg and Lucas promise will be the last, of the Indiana Jones series. Set in 1939, the film opens with an intriguing flashback sequence of Indy's first big adventure (with River Phoenix as the young Indy) and then quickly switches to 1939 and a fight sequence.

The film centres around 2 related plots: much of the humour comes from the constant arguing in Indy's relationship with his father (played, very well, by Sean Connery) and the action results from the trouble Indy gets into in his search for the Holy Grail, which as it turns out has been his father's lifelong obsession. Although not quite as action-packed as the first (I'll not comment on the disappointing second film), this film delivers plenty of good action sequences as Indy and friends fight Nazi's, rats, snakes, a beautiful woman, and, on occasion, each other.

One of the most amusing and interesting aspects of this film is the relationship between Henry Jones Sr. and Henry Jones Jr. (Indy. How Indy became his name, I won't spoil for you). They are constantly bickering at one another and giving each other humorous sidelong glances. Another interesting aspect is how the film peers into Indy's past and lets us discover some of what makes him what he is.

For a good summer flick (say the day after that C&O 230 midterm - "I'm sure you passed") with action and humour, Indiana Jones and the Last Crusade is a good bet.

What Seven Dollars!?

mastHEAD

Well, things are pretty quiet around here. Unfortunately our regular squizmaster was sick this week (get well, eh!). We've got two more issues coming out this summer, so submit your articles now. Some of you may have noticed that this week's theme was the Dome. Our tentative plan for the next issue is a retrospective of mathNEWS (This summer is the 50th term for mathNEWS). The only suggestions for themes for the last issue are 'fish', and 'ducks'. If you can think of anything better, please don't hesitate to drop your suggestions in the BLACK BOX.

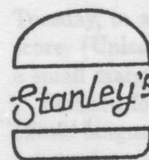
Now down to business. Thanks for the production of this week's issue to: David Weil, Thomas Sturrock, Andrew Tron, Dave Balkwill, Eric Kinoshita, Roger Maxwell, and Paul Sahota. Also many thanks go to Marion and the Graphics services people, and DCS and the I/O room people.

Remember folks, it's summer, so don't work too hard, and enjoy your mathNEWS!

Stephen A. Smith

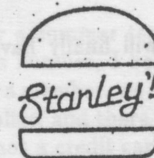
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mathNEWSquiz #3

Well, it's Friday again and this week our SQUIZmistress was sick (nothing serious though, so she should be back next week). Get well soon cards can be sent c/o the mathNEWS office. I'll be filling in for her this week. As for last week, there were exactly TWO submissions: The Anderson Annihilator (with 14/16 correct) and Carlos Donald (with 2/16 correct and 2 partially right). The lot of ya should be tahed and feathahed and shaht and . . . but I digress.

The answers to last issue's squiz are:

1. Steve Cauthen
2. Urs Raeber
3. Karen Magnussen, 1973
4. Indonesia
5. Etrog
6. Marlon Brando, *The Godfather*
7. M*A*S*H*
8. 59
9. 15
10. 1
11. *Happy Days and Laverne and Shirley*
12. 12
13. 6
14. *The Toronto Star*
15. pinkish-violet
16. Pius XII

For this week's squiz, I'll make it a little bit easier (but you may not find the answers in your trivia book Anderson!) so there will be more answers.

Sports

1. Who was the Barclay's League Footballer of the Year for 1988-89?
2. Who holds the record for most total bases in a game for the Montreal Expos? How many?
3. Who held the record for most career NHL playoff goals before Wayne Gretzky? How many?
4. What are the official distances (and events) for an Iron Man triathlon?

Movies

5. Who wrote the play that inspired Ken Russell's *The Devils*?
6. Which ex-Monkee starred in *Repo Man*?
7. Who played the original Sherlock Holmes in the movies?
8. What was the name of the monster in *From Hell It Came*?

Music

9. Where did anthropologists come up with the name for Lucy?
10. Who is the drummer for Eric Clapton?
11. Who was the original drummer for Rush?
12. What was the original name of the Moody Blues?

U.S. Politics

13. Name the only two U.S. Presidents that were knighted?
14. What did George Bush do during World War II?
15. Who was the person who attempted to assassinate Gerald Ford?
16. What is Gary Hart's real name?

Les Maitres du mathNEWSquiz

Ultra Classified

Wanted: 3 extra hours per day

Wanted: Copious quantities of grey matter. Send to B. Mulroney, 24 Sussex Drive, Ottawa, Ont. K1S 1M1N.

Wanted: 1000 gallons of Poly-Seal. Deliver to SkyDome, Toronto, as soon as possible. We'll pay any price.

For sale: 10 cases of stanazonol. Phone CTFA at 1-800-RUN-FAST.

For sale: one hangover. Will pay any price.

For sale: One slightly used MiG-29. Demonstrator model. Sustained minor damage at Paris Air Show but otherwise in perfect condition. Call 1-800-MIG-SALE during business hours or send e-mail to gorb@kremlin.gov. Make payments in hard currency only, please.

Hey dimwit, how do you like working for the big blue? -bro

Chemistry major seeks companionship of senior rec.bunny. Call Wayner.

To "Cha" from "Yooooo". Gotcha - Right?

There once was a frosh from C.A.
Who wore his black sweats everyday.
A turtleneck too,
And leather jacket brand new,
None have been washed since May. - Buddy # 2

Integers for June

Winners of the Miss June Integer Pageant

256, 34, 102, -6

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2 - 8x10, 2 - 5x7, 6 - Wallets;
5 Black and White Glossies;
ALL NEGATIVES!!!

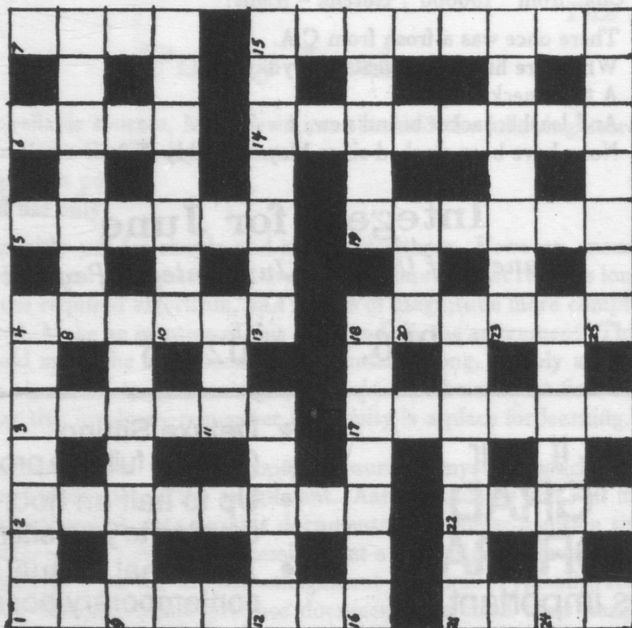
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Name: _____
 Favourite: _____
 SkyOne Activity: _____
 Comment: _____

**Across**

1. Storm the short thermal quantity in our winter time (7)
8. Greed for mashed caviar ends in the east (7)
9. It's for the best that Tim is in the gem (7)
10. Contracted the coal for one hug (7)
11. Sister sounds like nothing (3)
12. Clan leader can send a telegram (5)
13. Chemically measure the breast price (7)
16. Vocabulary for the cross image (7)
19. Encountered about the measure (5)
20. Give them ugly bird, Bwana (3)
21. Substitute for a house member's finery (7)
23. Chain letters before the beheaded giant are protesting (7)
24. Money about the location (7)
25. Villager types the asses (7)

Down

1. The hot are in vogue (8)
2. A game to hit a small car manufacturer (8)
3. I hesitate to dig this royal fur (6)
4. The ability to tutor fast (6)
5. Holy man is periodically a multiplicative creature (6)
6. Perform for a billion (4)
7. Any other Brazilian would be in hopeless circumstances (4)
14. Set in motion the penultimate Shakespearean division for the chemical tail (8)
15. Lifts with direction the wind shelters scattered about the bin (8)
17. Half a dance inserted into bonds (6)
18. Required the capless knee without a dead (6)
19. Baked good silencing without algae (6)
21. Coins with copper are not uncommon (4)
22. Pa's victory over Europe makes him resurface (4)

The Gridcomments at the End of the Universe

Good morning, GridDoers. How's it going, eh! Last week, there were fourteen Grid submissions. Eleven of those submissions were correct. We the GridMasters feel that this level of participation is just about right: there are people who manage to solve it, but not too many (thus separating the men from the engineers). We the GridMasters feel that we are in a groove, so we offer you another challenging one this week. But enough of my bombast. On to the List of Participants.

Correct submissions were submitted by the following submitters: Jammer; Carlos "I'm just a love machine, and I won't work for nobody but you" Donald; Sir Thomas; Octoculus; sideways MIKE; Crablegs; Paul Skratch; FIZZ; The Pup and ABG; Robyn Landers; and Elli V. Viess. Those who came up short were: The Mock Chickenloafs; Math 134B Pop-can Drill Team and Thinkdude.

Favourite Beer: Upper Canada Rebellion (last Wednesday at the 'Shelter); Cinquante; Poler Beer; cold; PADDINGTON / Winnie-the-Pooh (tie); Rootbeer; The one I'm going to have right after Dienasty [PS - Yeah, team!!] wins again; Molson Dry - Dome; Molson Dry; Root; Yogi Beer; Milk, Root, Yogi; Spills on the Carpet; Laurentide.

Comments: Caspar's got another hickey; I'm so full of action, my name should be a verb; Mayday! Mayday!; What is 42 in Metric?; Did any engineers figure out that it was sideways [I wouldn't bet my bingo money on it -CY]; Honourable mention to Pete; I can twirl my pen on my thumb 74 times in a row!! That must be a record; Bismillah! No - we will not let you go!; "But Captain, life is not a dream"; Make "Rockschool" a credit course [just like Shop - Heavy Metal Shop, that is - CY]; Psychic Siberian sleddog suspects that singer still survives; huh! Bring back Gilligan; Vanna White is the Goddess of Love; Ex is to beer what Ron Hextall is to hockey.

This week's winner is Jammer, who can pick up his glorious prize at the MathSoc office during normal business hours. Again, this week's GridWord cannot have been composed without the assistance of the Grad Club (which keeps a copious supply of the Double D), but an honourable mention must go to CYBERman's own brown ale, which started the ball rolling.

CYBERman

Thinking about graduate school?

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

Tuesday, July 11, 1989
3:30 p.m. - DC 1302

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

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

All students welcome
 Refreshments available