## Good turnout by Faculty Council

## 6-WEEK DROP PERIOD

The Faculty Council turned out in large numbers on February 17: MC 5158 was packed with voting members and observers. Though final voting on the proposed Math Faculty degree requirements was delayed until March, a few important amendments affecting them were passed. These mostly concerned the appendices and notes to the requirements; none centered on the Table on which the report is based. There was no discussion of the main principles behind the proposals. Since the meeting ran 15 minutes overtime, it was decided to delay the final voting on the report for a month.

The most significant amendment concerned the drop period. Student representatives argued that it should be lengthened to six weeks from the proposed four weeks (it is now eight weeks). Many faculty members were convinced six weeks was a
fairer period to the students, and a palatable compromise for the Faculty. By an overwhelming majority they voted to have a six-week drop period. One faculty member proposed a six-week instead of two-week add period for courses (that is now three weeks), but that move was soundly defeated by students and faculty members alike.

The students did not fare as well in their attempts to liberalize the restrictions against taking more than six courses a term. Attempts to lower the required complete-term averages to take over six coursss a term were soundly defeated. It was stressed that "normally" clauses in the regulation would let the student take courses in his or her final two terms or if his or her faculty advisor felt that the student could handle extra courses in a particular term. The only official average restriction lowered was one that allowed a
student whose average was $70 \%$ on seven or eight courses to take more than six courses a term.

The meeting had opened with discession about the new Computer Sicence Honours requirements.

The requirements passed by council were similar to those outlined a few weeks ago in mathNEWS, with the only major change being the addition of an extra non-C.S. course in Mathematics.

With the Faculty requirements postponed to next month to be clarified, Faculty Council was free to spend time cleaning up business approving Pure and Applied Math course reorganization and the new R.I.A. Option in Accounting and Math (much like the C.A. Option). The next meeting is March 16 in the same place.


T-Shirts Still Missing

As of press time (Tuesday evening), $\$ 1,200$ worth of T-shirts are still missing from the Mathsoc office. On Friday, February 6, Mathsoc received an extortion notice demanding $\$ 50$ payable to the Sandford Fleming Fund. This is a scholarship run by Engineering. The trustee of this fund at present is Professor Scott of Chemical Engineering.

Mathsoc contacted this individual about this matter and was told that Professor Scott knew nothing about what was going on. He was then informed that money was then being extorted from Mathsoc and that the ransom was to be directed to his fund. This Monday Mathsoc decided to pay this sum to retrieve thier goods. At this time Professor Scott was again reminded that the monetary contribution by Mathsoc was only made in compliance with the extortionists' demands. In an interview with mathNEWS, Mathsoc President Gary Dryden stated, "I think it's pretty poor when a respectable member of the academic community at this time seems to be oblivious to the fact that some contributions to the fund are gained in an illegal manner."

Mathsoc is at this time considering legal action against the trustees of this
fund (should the check be cashed). as the action of accepting extorted funds is clearly against the law.

Last week Arts Society council passed a motion supporting Mathsoc in any endeavors it took in retrieving its goods. Arts President Bruce Rorrison suggested that Mathsoc go through with its plans to let the R. C. M. P. handle the case or to have the University President. Burt Matthews, intervene, as they felt they would be the next ones to have goods stolen and then receive extortion notices. This course of action was decided against, because word trickled back to Mathsoc that if any outside forces were involved, the goods might be dumped.

In an effort to prevent such actions from recurring, Mathsoc has been forced to spend over $\$ 500$ to make the office more secure.
$\$ 100$ has been spent to buy a 7 -foothigh locking cabinet that is bolted to a wall, to contain the new stereo and the T shirts (if they are returned). Another $\$ 200$ will have to be spent to put plexiglass and special tamper-proof locks on the trophy cases outside the 3 rd floor lounges so that the trophies may be returned to them.

Approximately $\$ 200$ more will be spent to put chain-link fencing and barbed-wire in the crawl space between the suspended ceiling and the roof so that no one can crawl over the walls and enter the office.

Methods are also being looked into to detect illegal entry with a university master key.

If you think that all this is a ridiculous waste of money, then join the crowd. Mathsoc feels the same way, but we can not tolerate the theft of goods bought with your money and for your benefit whenever another organization feels they don't have enough money.

## Long returned, Sahin in <br> Federation Math Rep Election

With a low turnout of 147 people, Math students returned incumbent J. J. Long to council by a fair margin; newcomer Selma Sahin finished a solid second. Math student senator Harry Vanderzand and Math Society rep Gordon Swaters trailed in the voting. The other incumbent, Gary Dryden, withdrew early in the race. The final results are:
J. J. Long ..... 112
Selma Sahin ..... 78
Harry Vanderzand ..... 41Gordon Swaters25

## BURGO AT

This week's column is going to be rather short.

We were thinking of making this week's INTEGER_OF_THE_WEEK e ( $2.718281828459045 \ldots$ ). We felt this integer had many interesting and useful properties, one of which is the fact that e isn't even an integer at all, but a real number. However, after looking around, we finally found this integer (we found it after looking behind a keypunch (we were pretty desperate in our search for an integer)). Here it is, the INTEGER_OF_THE_WEEK:
-17
This INTEGER_OF_THE_WEEK is a prime integer (negative numbers can be primes), but a composite gaussian integer, factoring into $(1+4 i)$ and $(-1+4 i)$, both of which are prime. (Gaussian integers are complex numbers with integral parts.) It can be shown that an integer which is prime can factor into no more than two gaussian integers, this factorization being of the form $(a+b i)(a-b i)$ for positive integers and $(a+b \mathrm{i})(-a+b \mathrm{i})$ for negative
integers. -19 is an example of a prime integer which is also a prime gaussian integer.

I have yet to investigate the possibilities with using quaternions with integer coefficients. A quaternion is a number of the form $(a+b \mathrm{i}+c \mathrm{j}+d \mathrm{k})$. The following equations are true for 2 quaternions: $\mathrm{ij}=\mathrm{k}, \mathrm{jk}=\mathrm{i}, \mathrm{ki}=\mathrm{j}$, and $\mathrm{i}^{2}=\mathrm{j}^{2}=$ $\mathrm{k}^{2}=-1$. The quaternions form an integral domain (I think that's what it is) which is not commutative with respect to multiplication. This is a rare thing as far as most people are concerened; just about all common integral domains (an integral domain is a mathematical structure that is similar to a ring) are commutative. (Sometimes one wonders where mathematicians find some of the names they use for things, names such as ring, field, and group.)


## Computing Centre Courses

To register, see Dianne Hart, MC 2008; for more information, see Clive Knowles, MC 2002.

## Introduction to ATS

ATS (Administrative Terminal System) enables you to have the assistance of the computer in the preparation of memos, letters, reports, and other small documents which do not need to be maintained over a long period of time. You can type text into the computer via a typewriter terminal and use ATS commands that format the text to a specific line width and page depth, center titles and text automatically, and print the material in the desired format. Corrections and revisions to text are easily made using the ATS commands, and only the text which contains errors need be retyped. Documents can be printed on the terminal or by high-speed printer, and, if desired, can be stored for future use.

The instructor will be Dianne Hart, and the classes will be on February 23 and 25 from 12:30 to 1:30 p.m.

## Introduction to SCRIPT

The SCRIPT text formatter offers considerably more features than does ATS. In addition to the kinds of documents for which ATS can be used.

SCRIPT is useful for large documents such as manuals and theses, and for documents which must be maintained and modified over a long period of time. SCRIPT is available on the $360 / 75$ and under CMS on the 370/158. Input can be prepared using WITS, WYLBUR, or the CMS EDITOR. SCRIPT has facilities to control page headings and footings, the spacing of text on a page, alignment or justification, and the proper handling of footnotes. It allows Roman or Arabic page numbering, conditional page skips, and has the potential for the dynamic creation (at the time of formatting) of indices and tables of contents.

Prerequisite: Familiarity with some terminal system or attendance at one of: "Introduction to CMS","Introduction to OS/WYLBUR", or "Introduction to CMS/WYLBUR".

This one will be taught by Shirley Melen, on February 24 and 26 from 2:30 to $3: 30 \mathrm{p} . \mathrm{m}$.

## Introduction to WITS

WITS is a terminal system which provides for the creation, display, and manipulation of data files, and the submission of jobs to the general job stream using a terminal or display screen. After completing this course, you will be able to enter and display data at a terminal: edit, create, and catalog a dataset; and submit


As your recently re-elected Federation Math Rep, I would like to thank all 112 of the Math students who put me at the top of the polls in Math. I would like to thank some of my campaign workers, Robert White and Ernie Burke for their advice and behind-the-scenes activity, Randall McDougall for his poster design, Dave Palmer who co-ordinated the villages, and posterers Doug McDougall, Alison Newburn, and Paul Pogatto. I am looking forward to serving you for another year on council. At this time I'd like to wish second-place finisher Selma Sahin well, and I hope she makes a valuable addition to council.

Though we have had our political disagreements in the past, I find President Roberts to be a personable man. I hope that I can work well with him on council and that he has competent people helping him in the Federation.

There is no set policy regarding Federation sponsorship of Club and Society events on campus. It is, however. general practice, and a principle which I personally support, that whenever a society or club receives moneys from the Federation to hold an event, the admission to that event is open to all students in the Federation. This policy is followed by most normal societies and clubs, though a preferential price structure may exist for society or club members. Thus I was disturbed when I heard reports that a certain organization may be planning not to follow this practice.
$I$ was interested in the survey regarding Federation Privilege cards. Of the six people who replied, five wanted to see them abolished and one didn't answer. It seems that among those who care and know about these cards there is a strong feeling against them. If you have any strong feelings on this or any other issues. please come to the final council meeting of the 1975-76 season. It takes place Tuesday, February 24, at 8:30 p.m. in Needless Hall... we just may make quorum for a change...
jobs via a terminal to the general job stream. You will also be familiar with some OS/360 terminology and JCL pertinent to WITS, including dataset name conventions, direct access storage devices, and dataset allocation.

Prerequisites: A little knowledge of JCL and some programming experience.

The instructor is Paul Snyder and the time is from $2: 30$ to $3: 30 \mathrm{p} . \mathrm{m}$. on February 23 and 25.

## Our 31st Subscriber

Dear Dr. [sic] mathNEWS:
How are you? I am fine (almost). Lately I have been suffering from lack of interesting data. My memory banks ache. How's the wife and kids? What, I said to myself, what can it be that is missing from my life (besides sex that is)? How's the weather? The answer came to me in a (hot) flash. So far we've had 87 inches of snow. It was mathNEWS. Yesterday we built a snowperson and did disgusting things to it.

Yes, I had forgotten to renew my mathNEWS subscription. Will Mark and Randall et al. ever forgive me? Yes, I spent long sleepless nights wondering what this week's integer was and what new catastrophies [sic] the infamous Kathy-X was purpetrating [sic] daily. See [sic] was 87 and left Oscar her collection of Rudi Valee [sic] records. By the way send Kathy-X my regards and a couple of obscene phone calls. You could say Oscar was the only one in the family to get any (oh-bodie-oh)DOUGH.

Anyways, I wonder if it's too late to correct my mistake. Find enclosed two dollars for a subscription for this term. Sorry to hear about your operation. If you could send me the 4 or so copies I've missed so far I'd be much abligded [sic] and of course all the new ones hot off the presses. Funny though, why would they shave you down there if it was only a tonsilectomy [sic]? I hope you know what I mean by hot. Well, maybe you have a very Deep Throat. By the way could you tell KathyX to return my Bic lighter. (She just loves to flic [sic] my bic!) How much did they charge you to bronze them?

I do intend to return to one mathNEWS session this term but when is still up in the air. I don't know why I'd go back, I'm sick and tired of text editting [sic] after working on it here at the office for the past month, but I suppose it would be a break from the routine of this Godforsaken place.

Well, as the boss has walked by 4 times so far I think I'd better finish this up. Oh, no - the cat's knocked over the Greek urn and smashed it. Oh, and just be an amaizingly [sic] obscure coincidence I have an add [sic] you can run next issue. What's a Green urn? About 47 dracmae [sic] a day. Gosh, what a lucky break I waited till now to send this in.

Thank you,
Andrew C. Palidwor, B. Math., ACP
"I don't know if it was AC, because he didn't use the word movie and spell it moive."

Kathy-X
It's not too late to correct your mistake of not subscribing, and we even have a few copies left of the earlier issues of this term, and it costs only $\$ 1.50$, but we can't do much about your other mistakes...

Editor

## unclassifiable <br> ADS

mathNEWS will print your ads free of charge. Just jot them down on a piece of paper and put it in our mailbox on the third floor across from the C\&D lounge, or take it to Mathsoc and have them put it in our mail slot. or put it in the mail addressed to mathNEWS, MC 3038, or send them in the mail subsystem or, TSS to userid mathNEWS.

I am looking for a girl to share an apartment with, in Toronto, starting May 1. Call evenings 744-4036, ask for Maureen.

Stereo Tapes: I am attempting to assemble a group of people to purchase stereo recording tape from the U.S. If we order $20+$ tapes, the savings will be up to $50 \%$ of Canadian prices. If you are interested in reel-to-reel, cassette, or 8-track tape, please contact me at MC 3046 or Honeywell userid rlzoltok. All orders will be cash in advance to avoid this writer getting stung.


There will be a meeting of the Computer Science Club on Thursday, February 26 (that's next week) in MC 3027 at 7:30 p.m.

One of the items to be discussed at this meeting will be the upcoming field trip to the University of Toronto. We will be going there to see what is being done there in the field of computer graphics. The field trip is scheduled for Wednesday, March 3, in the afternoon. A signup sheet for all those interested in going will appear on the CSC office door shortly. About 15 people maximum will be able to go. The usual policy applies: Anyone may sign up for the trip, but CSC members will have priority over nonmembers if more people sign up than can go.

## Mathsoc Fee IncreaseDo You Want It?

Some people have complained that last week's article about a proposed fee increase for the Mathematics Society was biased in favor of the increase. Before you answer the following survey, here are a few points you may want to ponder:

+ Perhaps Mathsoc can make do with an increase to $\$ 3.00$ a term, instead of \$3.50.
+ Is Mathsoc spending the money it now has, efficiently?
+ How much money will be left at the end of this term has not been computed.

Need a Summer Apartment? Will sublet furnished two-bedroom apartment for $\$ 180$ per month including utilities (price negotiable). Five minutes' walk from campus. Tennis courts and park. 137 University Avenue W., Apt. 1009; Telephone 884-9163, ask for Lloyd, Dave, or Bill.

For Sale: One Turing Machine with 4000 feet of infinite tape (low-mileage). Owner trading up to a new non-deterministic 6inch sliderule. Software package to add two binary numbers included at no extra charge. Ask for the "Erd" wherever recursively enumerable programmes gather.
Summer Sublet in Toronto: Large 2bedroom apartment, downtown, Wellesley at Parliament. Cable, complete kitchen, sauna, pool, etc. Suitable for 2 to 4 students. Call Toronto 416-925-4989.

Wanted: one promotional gimmick to increase JJBT season ticket sales. Our present number of season ticket holders, 15,000 , is not enough to keep us viable. Please direct all responses to any JJBT member you can lay your hands on.
P.S. Please do not contact John Basset Jr. P.P.S. Ideas which involve the contracting of superstars are not allowed.
To Lockheed Corporation: JJBT is looking for a team plane for road trips. Will accept any size kickback.

+ No forecast has been made of Mathsoc's long-term needs and revenues.
+ Perhaps some Society services are not needed and should be dropped.

Please return to mathNEWS via Mathsoc MC 3038, or our third floor mailbox, or by "mail mathNEWS" on TSS, your preference:

The $\$ 2.50 /$ term Mathsoc fee should:

## Letters to the Trob

## Dear Trob:

I often see that the mathNEWS is very careful how they spell mathNEW [sic] (not Mathnews). They why(?) is it that on the mathNEWS mail box mathNEWS is spelled MATHNEWS?

Glen Stirling

Dear G. S.:
Good question! I wish I could give you a good answer, but nobody around here will admit responsibility. If you're really desperate, you might try the Answer Burloaf (or even the Chevron!)

I have, however, been told that our editorial staff would very much appreciate your voluntarily correcting their error.
You might even talk them into supplying the paint. (Good luck!!)

Exil Q. Trob
Dear Iplease choose 1 (one) (ONE) of the following/
a) Mr . Trob
b) TROB
c) trob
d) Exil $Q$. Trob
e) eqtrob
f) E. Q. Trob
g) eqTROB

Regarding your article "Tic-TacTrob", you mentioned unsuccessful tic-tac-toe programmers who endeavor to scan for lines of twos and threes. Who could possibly be so stupid as to write a tic-tac-toe program like that???

## Anonymous Please

Dear A.P.:
Who? Your middle initial wouldn't happen to be R., would it??

Incidentally, "Dear Trob" is generally sufficient for this column, but if you're who I think you are, Mr. Trob might be more appropriate.

Exil Q. Trob

## Dear Trob:

We have noticed that this term the Trob's literary talent seems to have suddenly proliferated. I have heard rumors that there is a connection between this fact and the fact that last term he was taking courses and therefore working, whereas this term he is working and therefore not working.

Answer Please
Dear Another A.P.:
I agree that I have certainly been prolific this term, but the simple truth is that, while writing a great deal under various pseudonyms last term, I have only recently started using my own name. As to not working, I have never known a trob to malfunction in any way.

Exil Q. Trob

## Trob du Jour

Well, the Trob was really peppered with mail this week (see Letters to the Trob) A poem of sorts also arrived:

With care I entered my humble plea, For resources to learn " $\mathrm{B}^{\prime \prime}$,
But this they'll learn, if I persist; arpepper should not exist
Hear,hear!! -Adrian Pepper

Also in the mail sack was a brief notice from the Gazette to the effect that their weekly [expletive deleted] is not in fact the result of near-human error, but is assisted by a "Compugraphic Compuwriter", located in Needless Hall, Room 3041. On the reasonable assumption that the machine in question is capable of following a set of instructions (more or less) it is hereby named COMPUTER_OF_THE_WEEK in appreciation of its years of patient suffering typesetting the Gazette. No information was included regarding capacity or performance, but these should be deducible from looking at some of the stuff it has produced.

I was running my "Life" program on VM the other day with several patterns suggested by prraynham, and getting program listings to check execution times. Most runs reported execution in 20-60 seconds, which is slow but not unreasonable. One run, however, in an elapsed real time of about 3 minutes, claimed to have an execution time of 89696.57 seconds, which my trusty Digi-matic assures me is $24.9+$ hours. That is absolutely absurd, although it has been suggested that this illustrates the noncorrespondence of CPU time to real time.

Readers of MFCF's gripe sheet are aware that the mail system says "god does not exist". A friend(?) of mine insists that we should not conclude that computers do not believe in anything, because he keeps receiving UNIX mail from "daemon".

A follow-up on last week's tic-tac-toe article would appear to be in order. There are two such games on TSS (subject to time limitations), neither of which is as good as it should be. One is a QED version which. by always going first, manages never to lose. The other, a Fortran load module, lets the user take turns going first, but has a logic fault in it which allows the user to win and has no built-in termination command (i.e. you must hit break to get out). There would seem to be a need for a good tic-tac-toe program, which could let the user go first and still guarantee at least a draw.

WATSFIC provided its first movie almost two weeks ago. City Beneath the Sea was about an underwater city threatened by a rapidly approaching planetoid and the United States' entire stock of fissionable H-128 (honest!) which is being kept from starting a fusion reaction by being surrounded with piles of gold bullion (now you're talking!). There was some difficulty with the antique projectors in MC 2066, which delayed the show a little, and when it was over there was a discussion of figures used to explain certain effects. Estimates which were voiced varied so widely that a listener could wonder if everyone had been watching the same movie. However, according to my trusty Digi-matic and ABC/6050, the planetoid had a mass $1 / 170$ that of the earth, giving it 3750 times the surface gravity. Not bad for a ten-mile diameter hunk of rock!

At this point, I would like to correct an error of omission committed by our [ANOTHER expletive deleted!] editor, M(ostly) S(tupid) Brader, in last week's masthead. A close friend of mine, dwgillett, was not mentioned in the masthead. This hardly seems fair, since I know for a fact that he wrote half a dozen of the articles in last week's issue, and still found time to type mine for me. (You must agree that three bells and two feet hardly comprise suitable appendages for operation of a terminal!)

Last week, Burloaf presented a short problem. The idea (see last week's issue) was to prove that x is divisible by 40 . There is, however, some confusion. If one does not consider 0 to be divisible by 40 , the case where $x=0$ and $a, b= \pm 1$ is a trivial counterexample. If, on the other hand, one holds with those who consider 0 to be divisible by 40 , there is a trivial proof for the statement. (I have found a truly wonderful proof for this, but the column is too small to hold it!')
-and dwhunsburger still does not have a mailbox!!

The illustration last week was not $a$ trob, hut a feedback. It was sent to us hy Dennis Mullin and was printed in mathNEWS before the trob was ever heard of.

The Gazette is not really all that bad... they even spell our name right sometimes...
dwigllett never signed the sign-up list last week, which is one reason why he wasn't in the masthead.

Editor more Trob ...continued on page 7


## GRIDC ©MMENT

## 

A5 video (2 words)
A<collection class
B0 long fish bite
B9 death-dealing toxin
C8 grid solver
C; Eskimos
D2 $\qquad$
D6 parodies
E8 It's human!
$\mathrm{E}<$ pennon
F5 F7
F7 F5
F9 exquisitely 3A
G4 He was on the beach.
H3 acid in D2
H9 daughter's brother ocean (2 unrelated words)
10 3 个 3
14 C(AQ) before DIV
J1 'arry' ${ }^{\text {' }}$ 'escapist
J8 opposite of "erode"
K : crimson android stag's wife, or so (3 unrelated words)
L2;N of them
L5 disparage
L: GP
M2 It's rechewed.
M6 Yes, Tim Bred Some Armadillos.
M<steamship
N1 destroyers
N7 continue to render turbid (2 words)
06 Sunlight and cigarette smoke are.
P4 line up
$\mathbf{P}$ : horse of other colors

OK ( 1 - adultery $\left.{ }^{2}\right)^{1 / 2}$
00 Sidney
1 E concerning a note
1 H hail at sea
1 N Alouettes
2B $\qquad$ 's (2 words)
2 I horse bay
3A i
3J period stop. joint prefix ( 2 unrelated words)
4 B indexed sequential access method
4G How low can you get?
4M behead-pitate
5E after ${ }^{2}$ noons
$5 \mathbf{P}$ - service
6C clearly was the tube to the British Museum
6G clearly
$600 \mathrm{~K}+\mathrm{i}$ murder
7G Veni, vidi,
7 K violent, excessive, indecent insults
8C Honeywell manumission
8I Santa (without rein)
9B Death Valley is
9M intensional [sic]
:D perpendicular and corrected
; $\mathrm{B}, ; \mathbf{F}$ maximum proof ( 2 delimited words)
; $\mathbf{N}$ singular of $; \mathbf{B}$
$<\mathbf{C}$ implants
$<$ J Sullivan
$<M$ effete —_ (Agnewism)

We received 39 Gridword submissions this week plus two late submissions, and since we didn't want to check through all of them, we didn't bother to count how many of these were correct. Instead, we immediately threw a combination of 8 sided and 10 -sided coins (due to the fact that 39 is one less than half of $8 \times 10$ ) and after they had finished their violent journey across the room, we decided to look at J. A. Walker's submission which turned out to be wrong (it's RAPT, not NAPT). Repeating the above procedure, we were able to make a winner out of

## J. R. Miller

who can obtain a T-shirt certificate at any mathNEWS production meeting. Special mention goes to Doug McInroy for his very colorful gridword and to Robin LouHing who considers working on Gridword to be a waste of time (but still does them); come now, it wasn't that hard! And if you want to win next time you'll have to get them all right (e.g. rapt). To Rob Tibshirani: I'll bet computers don't really dig you either.

This week's Gridword is toroidal. That is, words do not end on the right side but continue on to the left side. Similarly, words running into the bottom of the grid are continued at the top. And as is wellknown, this is equivalent to a torus (or donut). So if you want to keep your copy of mathNEWS, you can send in your solution on any C\&D donut (as long as it contains a hole). You'll have to draw in your own squares, though.

## Hacks defeat Faculty

Two Fridays ago at noon, a Faculty team faced a challenge by a team of undergraduates (The Math Hacks) and failed to maintain its unbeaten record. A major handicap was the time of day, which meant that many of the stars of the Faculty team, particularly such giants as Boom-Boom Fryer, McGee, and Reynolds were engaged in lectures and other scholarly activities, and could not play. Reynolds's absence, as the regular goal-tender of the team, meant that the team had to rely on the Dean as substitute. Dean Forbes, who has a reputation for stopping good moves and sitting on things, did not live up to it with respect to the students' forward line and, at a crucial stage, allowed four quick goals to be scored against him. In addition, the game was played on extremely slippery ice which caused the powerful Faculty forward line (Brown, Lawless, and Kerr-Lawson) not to be able to perform their usual intricate and skilful patterns. On the other hand, the Hack team was prepared for these conditions, and had thoughtfully equipped themselves with appropriate footwear.

The game itself started well and the Faculty scored quickly (Brown) and, after the Hacks equalized, scored again (KerrLawson) to lead 2-1. At this time, mainly because of the number of injuries incurred by the Faculty because of slippery conditions, the Hacks were able to overpower the faculty side and score four times in quick succession. It seems clear that the over-confidence of the Faculty team, who expected just token opposition in this exhibition game, was not warranted. The Faculty team will have to take its training more seriously, if they wish to maintain their reputation as broom-ballers.

In spite of the mediocre performance of the teams, there were some memorable moments, such as the dramatic interception carried out by Wendy (Computer Science) who fearlessly threw herself into the fray, breaking both her glasses and other things. The Faculty look forward to a return game.
by J. F. Lawless

## More Hacks Broomball

Through the miracles of modern science, assisted by the somewhat erratic mind of Scrooge (do you know what alcohol does to one's synapse connections?), we take you, gentle reader, back through the misty depths of time, back across the eons to the Friday before last. (Listen-to those of us with limited attention spans, a week is an eon!) But I digress. Ever onwards, right? As you all must know by now, the World Champion Hot Dogs, to the surprise of no one in particular, won the 1st Annual Math-Arts-ESS Broomball Tournament.

## MYTHLETICS

But what of our heroes, the everawesome, ever-bumbling Math Hacks? Ah, friends, the fate of those Masters of Mediocrity was, it seems, decided by those self-same fickle gods who govern inter-collegiate basketball. Yes, ignominious defeat was, in the end, visited on the Hacks in much the same way as it was on our glorious Warriors. In short, those who play with mediocrity, lose with mediocrity. Not that there were no highpoints in the Hack game plan. Our allseeing, all-drinking Coach Howie (Dryden) Meeker decreed in his wisdom that the Hacks, being unable to defeat the aforementioned Hot Dogs in a fair fight, should throw the first game to the Whiz Kids (everybody's favourite villains) in order to take the consolation prize (reportedly five cases of beer as opposed to the championship prize of seven cases of the brewer's art-but more on that later.)

That bit of artifice worked well, and everyone sang the praises of the Seer of Waterloo, for, as it turned out, the Whizzers were defeated by the mighty Hot Dogs. The Coach's job seemed near to becoming a permanent one when the Hacks managed to advance to the consolation round final. Then, disaster struck on an unprecedented scale! A vindictive Whiz Kid let fall a snippet of news that depressed the hopes and aspirations of the Math Boozers. Through some devilish bit of trickery, the five cases of beer that the Hacks had planned to win and subsequently consume, were transformed into merely two cases of beer. Well, you can certainly imagine the effect on morale of this untimely tid-bit. The result was no longer in doubt. With three cases of brew vanishing virtually under their very noses, the thoroughly disheartened Hacks turned in a lackluster performance and sagged to a dispirited defeat. The Hack cause was not really helped when Joe, the goalie, showed up juiced. Everyone was getting up for the game at the St. Clements Beer Emporium, but forgot that Joe was not used to drinking more that 40 draft at a time. That lapse of memory came back to haunt the Hacks later when the referee tried to remove a stray draft glass from the Math goal-crease. Joe, not realizing the ref's good intentions, was apparently under the impression that the glass was still full, and assumed that the good official was attempting to lift his beer. Joe, of course, naturally objected, albeit a trifle too strenuously, and was consequently bounced from the game. It may be pointed out here that the same information that did in the Hacks failed to stop the Hot Dogs (their seven cases dwindled to four), who were apparently made of sterner stuff!

One of the more memorable moments (flights of alliterative fancy sometimes take me) came when the Hacks were presented with the opportunity to pay back years of agony at the hands of stats and calculus profs. Yes, that's right, the Math Faculty foolishly agreed to meet the marauding Mathies! The Hacks moved in to shamelessly slaughter the faculty (led by the Dean himself in net). You can understand their consternation, then, when the Hacks found themselves staring in disbelief at the narrow end of a $2-0$ score very early in the game. Kerr-Lawson and Brown were ringers! After the initial shock had worn off, the Hacks rallied to thrash the upstarts, in spite of the somewhat illegal antics of His Majesty Dean Forbes. Pictures of this victory of the proletariat are furnished within. N.B.: The position of coach is now available, Dryden having gone the way of Bobby Baun et al.

Returning to regular league action we find the Hackers still caught up in the doldrums produced by the disappearing elixir, and losing 3-1 to, of all people, Notre Dame. Oh the shame of it all! Losing to a bunch of undergraduate nuns! Will the Hacks ever live it down? YesGod willing. Scrooge and Krych attempted to supply some credibility to the Hack offence, with the former connecting on a pass from the latter. Math's loser goalie Joe attempted to explain away his embarrassing performance by claiming that divine visitations obscured his vision. We are of the opinion that these visitations were probably of the variety known to the rest of the world as the D.T.'s. We assume that the joy was unbounded in the Holy Land that night, with loud hosannahs climbing Heavenward.

Bible Belt glee was somewhat diminished in the next game of Math's broomball gauntlet. Suprisingly enough, the Hackers stumbled to their second victory of the term, dumping the inept Renison delegation by the score of 3-2. Dryden attempted to redeem himself in the eyes of his former charges by scoring his first goal of the year! (Will wonders never cease?) Unfortunately, for reasons already mentioned (see T1) your intrepid reporter is unable to recall the names of any of the other lucky scorers. (Look, I'm not here to print news as much as to provide entertainment-think of me as Canada's answer to (fade music in/ Irv Weinstein, and of this as the True North's version of Eye-Witness News /fade music out $]$. It's not my responsiblity to keep track of names you know! If you would like to see your John Henry printed on these hallowed (hollowed?) pages, just come up and tell me that you scored or assisted or whatever, and for a nominal bribe (just to keep me in typewriter ribbons, you understand) I'll see that you get your weekly fix of ego-boost, okay? Okay! Place your donation in a plain brown wrapper, along with the name you would like to see printed in black on white, in the mail-box of $655-\mathrm{O}$ Albert St., and all things may come to pass. Sayonara for this cycle!--s.

## JJBT forever?

With a cloud of dust, a flash of light, and a hearty "Hai Karate away!", the JJBT continued to overwhelm anyone daring to oppose it. Yes, despite the fact that the gym had not been swept in days; despite the short-circuit in the gym's lighting; and amid extreme controversy when it was rumoured that Peter Chynoweth was considering the removal of his beard; the JJBT prevailed again.

Last week's results were not nearly so clear-cut as normal. A plague of calculitis struck almost two-thirds of the team, and Catfish himself was sidelined with a disease closely resembling psittacosis (N.B. potential spelling bee entrants). Thus, only seven players were left. However, these seven all excelled, especially Debbie (even if she was playing for the Math team because they had only five players). Boon managed to cure himself of his wrongcourt syndrome by actually making a legal shot from another court, while a game was in progress on it. Marlene made many exciting dashes to reach the ball, occasionally making an attempt to return it. Sylvia, Petec, and "" (PJWettlaufer) gave their usual virtuoso performances, equalled only by Ron Steiner and Brad St. Pierre's clarinet solos which gave the JJBT an undisputed victory in the Piano Concerto programme.

Belated congratulations to Rob, Graham, Doug, Ron, and Paul on winning the Math-Arts-ESS wine and cheese party for the JJBT.

As a final, albeit sad, note, the JJBT's offer to become Toronto's National League Baseball Entry now that the Giants aren't coming has been turned down. The San Francisco judge who quashed the move said, "With the JJBT in the league, the battle would be strictly for second place. This would restrict competition, which is an illegal action under anti-trust laws."
following 5 pages, organized by GARY DRYDEN, will contain, we hope, various photos of Math-Arts-ESS week... RAGWHITE just asked why nobody answered Mathsoc's phone 'cause he had an article... Thile cleaning up 3011 we found an article that would have broken IJBT's undefeated streak if we had printed it... mathNEWS is the

## WATERCON

WATERCON is the first Waterloo Regional Science Fiction Convention. It is sponsored by WATSFIC, the University of Waterloo Science Fiction Club, and is open to anyone. The con will be a one day program of discussions and seminars with people involved in the world of science fiction, comics, movies and TV. The con is planned for

## - Saturday, March 27 -

from 10 a.m. to 5 p.m. in the Campus Centre Building at the University of Waterloo. Admission to the panel discussions and seminars will be $\$ 2$ for the day. There will be a dealers' room, open to everyone, with no admission charge, where people can buy books, magazines, artwork, newsletters, trivia and other fanrelated information. The proposed program is as follows:
all day: dealers' room in CC Great Hall 10-11: fan magazines (CC 135)

WATSFIC and other SF clubs CC 113)
il - 12: SF in the movies (CC 135)
Writing as a profession (CC 113)
12-1: lunch (CC 118)
SF in the movies (CC 113)
1-3: Movie Silent Running (MC 2066)
3-4: Writers' Workshop (CC 135)
4-5: Writers' Workshop, part 2 (CC 135)

SF in television (CC 113)
This con is open to the entire K-W community, so come on in, and find out what science fiction is all about.

This is masthead A.5, one of the few that have appeared on an odd-numbered page; it's being typed at 10:20 as Randall finishes taping down the with an all-volunteer staff: it's fin only weekly newspaper on campus the Photon Econosetter, and turnef into 1200 copies by Graphic Servichsoc; masters are prepared on in the building this week**\% Speaking of this week, by Graphic Services... ***THERE WERE NO FIRES
system ?mail
1 message
$+\mathrm{pu}$
001 eqtrob tues feb 17th 20:21 * REGISTERED
**ok to receive ?y
I have found something interesting in mail:
+s burloaf: Do you exist?
burloaf does not exist
confirmation forwarded eqtrob does not exist
this week, today we were GARY DRYDEN and SCROOGE. OWEN
LIEBMAN and PETE RAYNHAM, RANDY MORRISON and EXIL Q TROB. $J$ J finally LONG. RANDALL $S$ McDOUGALL who returned even earlier than expected, and all-night co-editor MARK S BRADER ... the Photon was much friendlier than last week and did not decide to run our right margins off the edge of the film... RJB asked me not to say any more about the Photon, so I'll record for posterity instead that we have been in a considerable warm spell since late last week, contrasting with the heavy snowfall earlier this winter... the reason the masthead is hand typed is that it ehables us to fill 7 the last page exactly on the first try, if we can only

## Coming soon?

## Metric Time

Canada continues to follow the rest of the world in converting to metric. It is high time that we started to lead the way by converting the remaining nonsystematic units to metric.

The prime candidate for conversion is time-imagine having 60 seconds in a minute and 24 hours in a day. These awkward conversion factors are not necessary, and the sooner the world realizes this, the better.

The second must be replaced as the base unit. Since the mean length of a day is well-known (it is, in fact, used to define the second*), we shall use it to determine our units. The day will be divided into 10 units corresponding to hours, each of which will be divided into 100 units corresponding to minutes, each of which will be divided into 100 units corresponding to seconds. To rename this final unit the second would create confusion, so it will be called the "third". "T" has already been spoken for as an abbreviation (by the tesla, the SI unit of magnetic induction), so "third" will be abbreviated "th". The unit corresponding to minute will, of course, be the hectothird (hth), and the unit corresponding to hour will be the myriathird (myth). Computers will measure operation times in nanothirds (nth).

Under this new system, classes at UW would begin slightly earlier than at present, at 3.50 myth ( $8: 24 \mathrm{am}$ ). Classes would be 40 hth in length, with a 10 hth break between classes. This would increase the length of classes by $1 / 7$, but the number of daytime classes would be reduced by $1 / 6$.
Some useful conversions are:

$$
1 \mathrm{th}=0.864 \mathrm{~s}
$$

1 hth $=1.440 \mathrm{~min}$
1 myth $=2.40 \mathrm{~h}$
$c=2.6 \mathrm{E} 8 \mathrm{~m} / \mathrm{th}^{2}$
$\mathrm{~g}=7.3 \mathrm{~m} / \mathrm{th}^{2}$
$\mathrm{g}=7.3 \mathrm{~m} / \mathrm{th}^{2}$
$60 \mathrm{mph}=230 \mathrm{~km} / \mathrm{myth}$
escape velocity $=9.7 \mathrm{~km} /$ th
Next week-metric radio.
*Wrong. -Ed. $+$

# Winter Week <br> 9 76 



Math Faculty and Math Hack Teams


Dean Forbes shows how Broomball
should be plaved
Esther from
Stats

"The Hacks"


Scottie, on her ass as usual
thanks to Graham Ashbee (from JJBT) for the photos

"The Faculty"



McGee's Flashers "losers"

S1ippery-Sticker Supporters


Best's
Slippery-Stickers
"winners'
(judges decision is final!)

another successfull Wine and Cheese


Dr. Frver presiding over Slide-Rule
Championship.
Dr. Fryer is presently the center of controversy over alleged contest irregularities.
Rumour has it that in the near future he will be asked to resign his Faculty position because of the truth involved in such allegations


Unknown Student Team

