

## Super Sections and a New Degree

If you are in one of those special sections of first and second year Honours Algebra, Calculus and some CS, and are asking yourselves why bother; Math Curriculum Committee has some answers for you.

First off, you are getting your own courses, e.g. Math 144 instead of Math 134. Now you won't have the frustration of writing an exam that covers material you didn't.

Not enough you say? Curriculum agrees. Completion of special courses is going to become a requirement for making the select Dean's Honour Roll. As graduation is a long time to wait for recognition, a push is going to be made for an undergraduate Honour Roll in each year.

As well as inscribing your name in the faculty scrolls for eternity, you would get a special plaque. Needless to say, you would also place high on the lists for scholarships.

The most ambitious move since the attempts to change the faculty name has also started. The idea is to create a new degree aimed specifically at mathies whose primary interest is a professional career, i.e. CA's, Management Accountants, and Administration. At least 800 students would be affected.

We will discuss the ramifications and merits of the degree in the next **mathNEWS**, after receiving input from other sources.

Dennis Rekuta

## Computer Science Club

presents

Steve Johnson from Bell Labs on May 8. Topic - TBA

Gordon Bell from DEC on May 25 at 1:30 pm. Topic - Minicomputer Architecture

Brain Kernighan from Bell Labs on June 15. Topic - Programs for connecting programs

Frank Tompa from U of W CS Dept on June 15. Topic - Data Structures

Ciaran O'Donnell from CCNG on June 29. Topic - Security problems of computer networks

Nick Redding U of W grad on July 27. Topic - Computability

Joseph Weizenbaum from MIT AI Lab. Time - TBA. Topic - Social implications of computing

Marty Belsky from IBM. Time - TBA. Topic OS/360 History and origin

ALL ARE WELCOME

All meetings at 8:00 in MC 5158 unless posted otherwise

Friday, May 19, 1978  
Volume 17 Number 2

# math NEWS

## The Takith Prize of the Week

This week's **Grand Takith** goes to the Math students who refunded their Federation fees. By so doing, they not only hurt themselves, they hurt (indirectly) all other students. Not only do they hurt themselves by paying more at Federation-subsidized events, but there is less money available for Federation services and Society subsidies. Thus the people who leave their fees in are hurt by the refunders.

The second takith prize goes to the chevron for their May 5th editorial asking students to leave their Fed fees in because the chevron is such a **great** paper. A person aware of the past success record of chevron editorials, might conclude that the chevron was using a clever bit of reverse psychology in order to get students to take their Fed fees out. It is no secret that the Federation-chevron relationship has been somewhat less than amiable. It is interesting to note (draw your own conclusions) that in the four and a half days before the editorial there were 38 refunds, but in the six days following the editorial, there have been over 100 refunds.

JJ Long

## NEW SYMBOL FOR MATH

Do you realize that Math has a symbol? That's right, just as the rigid tool is to Engineering, the pink tie is to Math. What's that I hear you say? A PINK TIE????!! That's correct, a pink tie. Well, we've decided that, because no-one knows why the symbol is what it is, that we really need a new one. There have been a few suggestions such as a theta, an epsilon, and a VC terminal. Someone even had the gall to suggest that we hollow out a tree trunk and have the natural log for our symbol.

But, since it's your symbol, too, we realize that the only fair way to do it is to throw it open to you, the people, for suggestions. This will be open until the Friday before MATHWEEK and the winner will be announced during the glorious event.

Another thing we need is a new design for the frosh t-shirt. For this there will be a prize of \$25.00, (just think of all you could do with 25 big ones), and the contest closes at the end of July.

Get busy on these and drop them in to the MathSoc office where entries for both contests can be put in the Orientation mailbox. (Just ask someone where it is or see Kate.)

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## Early Refunds?

There this a possibility that if the chevron is separated from the Federation that a chevron fee will be refundable this term. **mathNEWS** has gained knowledge of Engsoc president Fraser Cutten's request that the Federation hold a General Meeting to discuss this matter after the May 24th referendum. Last Tuesday Engsoc Council backed his idea. They are now circulating petitions for a General Meeting to be held June 13th, which is one week after the date on which the UW Board of Governors will deal with the results of the referendum. Though the petition requires about 1000 signatures, Fed Council or the Fed Board of Directors can still call a General Meeting with a lesser number of signatures submitted.

Some concern has been expressed from various Math Society sources regarding the legality or the advisability of such a move. There is a question whether the implementation of such a fee would violate the referendum or the CUP bylaws. Fed president Rick Smit said that he would implement such a fee if students asked for one via a General Meeting. He sees no major problems with such a fee, provided the students vote for it. At press-time **mathNEWS** had not contacted chevron editor Carter and a chevron position on this issue is not known.

fred & wallace

## \*\* NOTEPAD \*\*

\*Getting confused? Beginning to wonder just what this column is all about? Well, you should be. My original conception of this column was to act as a sounding board for my own biased viewpoints with no regard for the ideas of others. Also, the column was intended to act as an ego trip, allowing me to look down upon my readers with an attitude of feigned superiority. In these respects NOTEPAD has been an admirable success, with one exception. You peasants never send me any mail! What is it? Just because I don't have a Honeywell account? I'm still the same old dthedmonds who led the war against involvement, who founded the Apathy International Association, who brought MEKACZMARCZYK (if that's how it's spelled) out of the gutter and into the light of everlasting ridicule! (After all, would you admit to living in Ajax?) What has happened to you all???

(Actually I, as director of the Apathetics Council, am pleased to see that, in your total disinterest in anything other than sex, you are upholding the principles we hold so dear.)

\*Are you feeling distant, depressed, and down? Is the MULE getting to you? (All non-SFers skip this paragraph.) Maybe what you need is a good dose of science-fiction, the literature which stimulates and educates.

In case you haven't yet guessed this paragraph is a straight, crass, materialistic, propagandistic advertisement for WATSFIC, UNIWAT's science fiction club. The first meeting of WATSFIC was held two weeks ago, and the second just last Wednesday. At the first meeting three of us were enough to make quorum, and Fuzzy and I could have single-handedly (double-handedly?) changed the constitution for our own fun and profit. This ridiculous state of affairs was brought about by a near total lack of membership. So keep your eyes open for the posters and come on out to the next meeting. We're nice people, we don't bite, not even engineers!!

P.S. I should warn you that wargaming is NOT a function of WATSFIC. The fact that a wargaming session just happens to start up in the same room, the same night, and with the same people as the WATSFIC meetings is purely a pre-arranged co-incidence. So even if you're just interested in wargaming, come waste some time in the meeting first. Who knows, you may even like it!

\*Rotten weather in Hamilton! Rotten weather in Waterloo! Rotten weather in between! What in the name of Alpha Centauri is going on here? I'm still wearing my winter coat halfway through May. It might have cleared up a bit by the time this comes out but I'm skeptical.

Anyone having any information on possible intergalactic subversion (i.e. Knirps, Taurans, Injun-ears etc.) please contact me via mathNEWS, there must be a conspiracy!

\*Y - don't ask what this means, just except it!

\*Whatever happened to...jokes about engineers, MEKACZMARCZYK (if that's how it's spelled), decent electives, enough girls to go around, justice, freedom of speech...

\*I'm rambling I know, but the first two weeks have nearly wiped me out. Not the classes or the work mind you, but village food. GOD that stuff is disgusting! I went home for the weekend and found myself burbling joyously over half an Oreo cookie with no yummy filling! Admittedly the stuff is edible, that's proven by the fact that most of it is half digested when we get it, but who would want to eat that stuff?

Hmmm. Better hurry, it's almost suppertime. We're having a treat tonight, they're not going to feed us.

\*Maybe I should cut this short. You think I should? All those in favour raise their hands. Aha! No-one wants me to quit, well then I just go right

ah\*=&&5%#\$>[ ]&&&&&&&\*-  
Hmph! Tried to sign me off! Well, what does a stupid computer know anyway? [more than you! -bun]

\*Perhaps I'll end this week with something actually useful.

Last week my brother purchased a Radio Shaft TRS-80 microcomputer and by the time this paper comes out, I'll be the proud owner of a Commondoor PET. I've put in some programming time on both, and gave a demonstration of the PET Thursday evening. If you want my opinion on which to buy, forget it. I had trouble myself deciding which I wanted, and only a good deal on the PET made me swing toward it. With level II Basic, Radio Shaft's compiler compares pretty closely with the PET, but then it costs you an extra \$150 to have your level I replaced with level II. But then again the TRS-80 is cheaper in the first place. Then again...aw hell! If you want to know something about them, let me know and I'll be happy to oblige, but otherwise maybe I should just save it for another column.

Bye now!

## MARCIA MATHIE

### THE ADVICE COLUMN FOR THE TERMINALLY BORED

Hello there, and welcome to the Marcia Mathie advice column. For all of you summer students who didn't have mathNEWS delivered over the winter term, (shame, shame) I re-extend my offer: Anyone needing advice and/or help, feel free to send your problems to me c/o mathNEWS either on the bun or drop them into mathsoc. I will answer any of the ones I want to. (ie. all cute guys) This column will appear intermittently throughout the summer term. (whenever I can be bothered to write it) So keep those cards and letters coming.

Marcia

Dear Marcia:

I have this problem. Since working on mathNEWS this term, I have fallen in love with its wonderful editor. I know he already has a girlfriend but she is not here for the summer. What should I do??

The Reserved Mathie

Dear Rez:

I would give this situation a lot of thought. Consider the pros and cons of the situation and weigh all the evidence. Then act on your decision in the following manner. If you decide you can get along without him, just forget it ever happened and join the Chevron to avoid him and a recurrence of this terrible situation. If you decide you do love him, my only suggestion is a good psychiatrist or suicide.

Dear Marcia:

Since the term started and I have taken over the editorship of this paper I have developed a sincere affection for one of the staffers, Kate X. I'm not sure, but I think she likes me. How do I find out if she really does?

ed

Dear John:

(I really don't mean this to be a Dear John letter.) It is not a good idea for you to become involved with your staffers. Besides, it's a bit of a kripp-out, if you know what I mean.

Dear Marcia:

I really have a problem. As you know, I have been working on mathNEWS this term and I have fallen for one of the other members on the staff. I just don't know how to approach the situation with Rez. I'm afraid she'll reject me.

Kate X

Forget about writing in folks. I think we have enough problems here on staff to keep this column going all summer.

Marcia



**MATH WEEK**  
**MAY 29 - JUNE 3**

**MONDAY**

12:30 **Slide Rule Contest** in Math Lounge  
Prize: Dinner in Laurel Room

**TUESDAY**

12:00 **Paper Airplane Contest Judging** in Math Lounge  
Must get Construction Materials From Mathsoc.  
Prizes: Tickets to Liverpool Pub

8:00 **Wine & Cheese Party** at South Campus Hall  
\$1.00 for Mathies who did not refund Math or Fed fees  
\$1.50 for Mathies who refunded their Fed fees  
\$1.50 for Non-Mathies who left in their Fed fees  
\$2.00 for everyone else  
*With Dancing Music*

**WEDNESDAY**

5:00 **Mathsoc C&D Buffet Pub** in MC 5136  
\$2.00 for Mathies who did not refund Math or Fed fees (and Faculty)  
\$2.50 for Mathies who refunded their Fed fees  
\$2.50 for Non-Mathies who left in their Fed fees  
\$3.00 for everyone else

Advance tickets available at Mathsoc  
7:30 **Cribbage Tournament** in Math Lounge  
Prizes: Tickets to Liverpool SCH Pub

**THURSDAY**

7:30 **Monopoly Tournament** in Math Lounge  
Prizes: Tickets to Liverpool SCH Pub

**FRIDAY**

8:00 **Liverpool SCH pub**  
\$1.00 OFF for Mathies

**SATURDAY**

11:00 **Mathsoc Once Over Easy Car Rally** in Parking Lot C  
\$1.00 Registration Fee  
Prizes: Trophies!  
For Complete Details, See Mathsoc Board on 3<sup>rd</sup> Floor

**Register for Events & get your Tickets in Mathsoc**

**Do it Now**

# The Adventure of the Calculus Kid II

## The Continuum Conics Caper

Many things have occurred since the first adventure of the Kid. Mr. Infinity is now on the good side of the law and works with real numbers on solving of  $x=\pi$ . The Kid's native equation of Cartesian was taken over by barbarous Polar CoOrdinates. Many Cartesians were triple-integralled and the Kid's sidekick CoOrdinate was held tangential by the Poles. But these stories will be told in later adventures.

The Calculus Kid had just returned home from a free lecture on transcendental functions given by the Indian sage and mystic, MAHAR $\Sigma$ hi(dx) M $\alpha$ H $\Sigma$ f(hi)dx YOGI<sup>(a,h $\in$ R)</sup>. He then remembered that he was supposed to help some of his friends. Mounting his trusty derivative Sin X, he oscillated to the log cabin of the late Fibonacci, who wished all his parameters kept secret. Despite his last wishes, his friends still wished to integrate his works into society.

Upon arriving his friends showed him a note signed by the late Fibonacci; it read:

"Whoever enters here, I place a recursive function upon him, that he will spend the rest of his days in a higher order of quadric surfaces with infinite limits."

This frightened even the Kid. He told them all to run for their triple integrals but suddenly the room vanished about them....

Continued after a word from our sponsor and station integration.

Good evening, ladies and graphs. Have you lately found your Cauchy mean value theorem valued? Now we have found the answer to your new problem by the use of our latest discovery—The Lagrangian for a given equation of motion. Your

nonconservational forces  $f^\circ = m dv^\circ/dt$ , enabled us to deduce with a minimum of effort your equations of radiation reaction which, being the result of a non-conservational force, cannot be expressed in the Langrangian formation. Now however, we have

found that the new equation is

$$\frac{dE}{dt} = \frac{3}{4} \left( \frac{g^2}{4} \right) \left( \frac{a^2}{c^3} \right)$$

This causes an absence of an external driving force which solves all your problems. Remember, when you feel your Cauchy mean value theorem vector becoming valued, come to us before you become triple-integrated.

This is television station  $y' = uv' + vu'$ , bringing you the Riemann series weekly, except on indeterminate equation days.

Now back to the action-packed Adventures of the Calculus Kid.

After the room disappeared Calculus and his friends found themselves in N-dimensional space. "Don't panic," he told them, "This space is finite and bounded; soon we will be out of here." To be sure Calculus prayed for his dead uncle Binomial Theorem to help him. Using mathematical induction to help him he figured out that in approximately 2 hours 6 minutes 19.496545789086478914 seconds they would be out of that space (using his pocket UNIVAC, of course).

The required time passed and suddenly they found themselves in a strange place. The Calculus Kid said, "Holy integrals!!! We've been transported into a differential world!". Half his friends fainted. Calculus sat down to think. For every differential there is an integral which will return us to our original equation. We must locate this. But how? Calculus thought back to his meeting he had with MAHAR $\Sigma$ hi(dx). He had said, "Calculus, you have got de main facts. But you know not true Calculus until you have transcended de junction and arrived at the absolute integral. Do not seek for dis knowledge; it will come to you at any time. You will know of its arrival." (of course, the funny writing means an Indian accent, not that the writer cannot spell. (*typist: it means the typist can't type*)).

After his friends had revived, Calculus told them that they would stay at the place for the night. After they had built a fire, one person took out his 5-stringed Diophantine equation, and began to sing:

Long time ago, in Cartesia  
So the scientists do say,  
There was born one day under a cosine,  
A rectilinear known to this day.  
He was born by trigonometric substitution,  
and with e inscribed on his hand,  
He knew concavity and points of inflection  
Was the greatest genius in the Land.  
At the age of 4 integral calculus  
Had become such a bore  
That he went out of Cartesia  
And was a crime-fighter,  
evermore.  
When after attempting  
7-integrals,  
He tried improper integrals with  
an infinite limit,  
He thought he had infinite curvature,  
But actually he was full of shaving cream!

Next day as the sun rose above the generalized Finite Matrix Hamiltonians, the Calculus Kid and his friends left to find the definite integral to return them to their native equation. Calculus thought of his morning meal.

How he could do with a

$$D(E) \equiv + y^\circ \sum_{n=0}^{\infty} \frac{|f_n|^2}{\epsilon m - E} = 0.$$

Learning out that  $\sigma_n = \delta |f_n|^2 \left[ |f_0|^2 + \right.$

$\left. \delta \left( \frac{|f_0|^2}{E - \epsilon} - \frac{|f_n|^2}{E - \epsilon} \right) \right]$  he figured out that for the integral to be equal to the original equation the constant must be 0  $\therefore$  where  $r=0$  the integral will return them to their equation.

Thus they had to set out on a journey to the centre of the Attractive potentials.

As they set out they were attacked by an inverse hyperbolic function. The Kid leaped in its path; with at quick karate  $\cosh^{-1}(x)$  the function fell back. It quickly recovered and came forward. The Calculus Kid was in trouble; he was fighting a foreign identity in its native land of Continuum Conics; he could be triple-integrated!!

The monster attacked with a

$$dx(\cosh^{-1}u) = \frac{1}{\sqrt{u^2-1}} du, u < 1.$$

Calculus fell back, quickly opening

his Calculus Made Easy. He found the chapter of his life's work, INTEGRALS. Waving his magic wavepacket generator he countered with an outburst of quantum energy equal to

$$\left\{ 1 + \frac{v^2}{8T(T-V)} \left[ 1 - \cos \left( \frac{4a(2m_p(T-V))}{\hbar} \right) \right] \right\}^{-1}$$

With his right hand he thundered

$$-n \exp\{-a^2/2(M+m)\beta\}$$

$$\text{shh(c)exp}\{i[M/(M+m)\beta]\}$$

$$\int [M(w-c) - M(w'-c)] dc \exp\{i[M(M+m)\alpha \cdot w]\} \sigma w^3 \partial \Omega w \partial \Omega w'$$

After that, all that was left of the alien creature was a classical analogy to the Ramshauer effect.

By following increment of functions of more than one variable and indeterminate focus with Discontinuous Integrands they slowly made their way to the center of the Attractive Centers. Near the end of their journey, Calculus' sensitive mind could feel the energy radiating from the derivation of the one-dimensional Dirac equation. At the end of the journey was a sight that almost triple-integrated the Kid. It was

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## Sir R. Reports

### *The White Knight's Last Battle Cry "Free The Chevron"*

Almost a year has passed since June 26th 1977 when the Federation of Students reinstated the chevron against almost all the expressed wishes of the student body. Yet the chevron issue did not die on that day, and on the contrary, much has transpired in the past year. For today we stand within sight of one of the basic goals which many persons, including myself, have been fighting to achieve. For on Wednesday May 24th students finally get their chance to voice their views when a referendum is being held to separate the chevron from the Federation of Students and to give the chevron its own, separate, refundable fee.

To better understand the meaning of this vote we should look at the goals, with regard to the students' newspaper, that many of us have been attempting to work towards for the past several years. The numero uno of these, by this I mean the pot of gold at the end of the rainbow, is to have a student newspaper which represents the students on this campus. By this I do not just mean their political views, for on the contrary, politics should be down-played considerably in the student newspaper (and it should be basically non-existent in a paper like **mathNEWS**, but sadly enough this has been impossible given the current state of the chevron). The student press should concentrate on giving fair, accurate coverage of campus activities, in all fields, academic, social, and sporting. It desperately needs some degree of humour, and should basically be a paper that students desire to read, or at least not get upset with it every time they pick it up.

Now these are worthy goals, yet they are very difficult to achieve, for I know of no student newspaper which has achieved them, although I am not familiar with very many student newspapers. Yet I feel that we very definitely have the talent on this campus to accomplish this goal, as a matter of fact it used to be on the chevron staff but was never channeled in the proper directions.

So the situation that we have then, is that given a student newspaper which is far from the above goals, one which discourages contributions from average students, and one which is dominated by a very small group of individuals who are interested only in having it promote their political beliefs, and one which has alienated most of the student body, there must be a way to make this newspaper accountable to the students. For years the chevron has been able to hide behind an unnecessary bureaucracy, using the tools of democratic government to suit their purpose, to protect itself from this responsibility to the students who pay

for it. Now we have a chance to change this, to force the chevron to stand on its own, to force some degree of responsibility upon it, for if students don't like it they will not have to pay for it.

Don't make any mistake about it, the issue at stake here is freedom of the press, but the question that must be asked is, what is this freedom?

Consider that Neil Docherty, Larry Hannant, and the rest of the A.I.A. will tell you that I and others have no right to speak, while I on the other hand say that they have every right in the world to speak, but I don't believe that I should be forced to pay to hear what they have to say if I don't want to. So then, who is defending the principles of democracy, and who is contorting them for their own use?

So on May 24th you have a chance to help free the press by giving the chevron its own separate refundable fee. Please exercise your right to vote, for if you don't take the 2 minutes or so necessary to do so, you are really relinquishing your right to bitch about the chevron and are responsible for what you get. Remember, the referendum is on Wednesday May 24th. The polling stations are open from 9:30 to 4:30, with Math students voting in the hall in front of the lounge on the 3rd floor of the Math building. Please take the time and vote.

So ends my last article on the chevron, in this, what will probably be (I hope), my last column. Its 4th year now, and time to bear down for the final run to the finish line, and to get out into the world and to start making some money. I've been banging my head against the wall for three years now in the service of students, in not only my involvement in **mathNEWS**, but also by involving myself in just about everything along the way from being a hanger-on with **mathNEWS** and **mathsoc** since 74 to my decisions during last year to cut back and turn down the several federation executive posts that had been offered to me. I think now that its time to learn how a normal university student lives.

It hasn't been an easy time along this route as I've always had to resolve conflicts between my academic life and my involvement in student affairs. I've had to play both ends of the game, with the result that my friends with whom I'm involved academically feel that I've devoted too much time to outside activities (at the expense of my honours C.S., business, and until this term, stats), while my friends at **mathsoc** and the federation feel that I'm not getting involved enough, especially in the past year, when I've really cut down my activities in these areas.

But its been fun, frustrating at some times, while extremely satisfying at others. I really have to say I don't dig this role of being the person whose been around **mathsoc** longer than anybody except for JJ. Most **mathsoc** persons have either given up on university or

long since gotten their pass degrees and gotten out. I'd like to thank everyone who has helped me over the last few years, but most of them are long gone. I'd also like to apologize to those people that I might have offended over the years in this column, I've recently realized that sometimes in my eagerness to accomplish what I know to be right I've been unfair to some persons, being too quick to judge and evaluate them.

Well anyways I think that the world has gone crazy and its about time to get off. When half of the Federation executive, (people I like to consider as friends), is made up of persons I used to yell and scream at on the chevron (and they used to yell and scream back, it was loads of fun), and when former chevrics tell me to unmercilessly attack the chevron in this column because theres no-one left on the chevron staff to offend, its time to get back to the sane world. Bye and thanks.

*Steve L Risto*

Steve L. Risto

## Peter K I

Greetings, folks! If you don't remember reading this column before, it's because I haven't written one before. You might ask what would make a normally sane math student write an article for this paper. When we took inventory of the number of warm bodies we had masquerading as writers, we discovered that we had a grand total of four. Obviously four writers are not enough to fill the **mathNEWS** with those dull articles and columns that you love to pass those dull Friday lectures reading. Now I am just as capable of writing a dull article as the next man so I was pressured into volunteering to become a writer. This column, if I maintain my current level of ambition and write it regularly, will bore you on the usual topics that **mathNEWS** writers bore people on. It will present my views on campus politics (i.e. give me a platform to denounce the chevron), fill you in on campus events that I attended, and you (being typically apathetic), did not. (Of course, if you were too disinterested to attend the actual event, you certainly won't be interested in reading an account of it). Finally, when I run completely dry of ideas, I will review an album, old or new, that every connoisseur of fine music should have in his collection.

Now that is out of the way, on with the article. Last Thursday at 7:00 WATSFIC held its organizational

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# Non Compos Mentis

off-colour, off-topic, and off-term

It is the first day of my first work term, I am on crutches, and it is snowing.

Other impressions remain in the background as I ride the bus home from the Chalk River Nuclear Laboratories, located somewhere in the middle of the Canandian Shield. The cost of the bus ride is being deducted from my forthcoming paycheck, as is my rent at the company-run hostel, my parking space, income tax, unemployment insurance, pension plan, and enough other goodies to make it look like a swiss cheese. My crutches make a furtive attempt to escape under the next seat, and I gently admonish them.

I had never realized just how awkward crutches can be, especially when one is starting out at a strange place three hundred miles from home. The weight of the body is not placed on the armpits, but on the heels of the hands: I am developing callouses in interesting places. Try an experiment: tie your arms behind you and go about your normal routine, upright. I can't even manage the trays at the cafeteria, not to mention having difficulty with such essentials as traversing sets of stairs, driving a car, tying the lace on my one shoe, and taking a shower. One must learn how to conserve angular momentum all over again; the main struggle is to avoid obtaining a greater intimacy with the pavement than is good for my face while trying to keep out of the way of impatient pedestrians.

It was Mr. and Mrs. Rock'n'Roll America that did this to me, my personification of the reality-distorting elements in late twentieth-century life. I have never been a good basketball player; always the last selected in gym class, and a definite embarrassment to my intramural teams in elementary and high school. But I was invited to play by a good friend, with others unknown to me, and Mr. and Mrs. Rock'n'Roll America convinced me that it would be a bad impression to just watch. So I played, and in the middle of waiting for my second wind to come while keeping up a facade of participation, there was a rush on our net, and I ended up on the bottom. Blocked the shot but sprained my ankle.

My crutches are looking around desparately now, wondering if they'll ever get to see the inside of Bracebridge Hospital again. The rubber foot on the right crutch -at least, it always ends up on the right; crutches are ambidextrous or bisexual or something like that- has developed a definite creak. It started to complain after having been forced to wait in line through three hours in the Employment Office ("government bureaucracy" a friend had warned, but I thought a Crown corporation would be exempt) and watch me go through

fingerprinting, several Polaroid poses, and a rather lengthy loyalty oath (to the Queen, of all people, and sworn on a Bible; a copy of the Honeywell 6600 Reference manual would bind me better, or maybe a copy of Stranger in a Strange Land.) I was issued a temporary radiation badge (under the terms of my contract, I'm allowed to be exposed to ten times the amount of radiation you are), and escorted by my new boss to the Mathematics and Computation Branch, damn near lunch time. It is now 4:30 and we are passing through the spunky little village of Chalk River, existing in a T-formation along Highway 17 and the road leading down to the plant.

THE hostel is gradually filling up with summer students; though there are only eleven Waterloo Co-op students here, the government hires over fifty students on their own. I'm easily the youngest here, and it remains to be seen whether that will be a disadvantage. Home is an idea, not a place; and in that respect, this is the first time I've left home, for there's not a single person I can lean on. It will pass, as will the sprain, but for now I can hide behind the tensor bandage and take delight in the faces becoming increasingly familiar me. I'm trying not to think about the boxful of computer cards that my boss put on my desk this afternoon, with a loader map and actual dump from a compiler I've never seen before, with the comment "This doesn't work."

The bus has stopped opposite Maple Lodge now, and I shift into a now-familiar routine: crutches forward and down, shift the weight forward and swing now, arch the back, feet coming through, locked arms, touch with the right foot, pull the torso forward and swing the crutches around again. It's almost a pity that I'll be off these before I get good at them.

-plragde

## C.A. Training Program

The second part of the C. A. staff Training Program will take place on August 14 - 17, 1978 in Eng. 2, Room 1310. Starting time will be announced at a later date.

Any C. A. student returning from a first work term who did not take the first part of the program in December 1977 should contact Phil Wright, Department of Co-ordination and Placement, Needles Hall, Room 1095.



SNICKER, SNICKER  
KATE GOT TOWED

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meeting. For those of you that don't know what WATSFIC is (and there are an awful lot of you as only six people showed up to become members), it stands for "University of WATERloo Science FIction Club". It meets regularly so that club members can discuss science fiction, lend each other science fiction novels, and wage war. "Wage war?", you ask. Yes, conduct great battles on combat simulation games. So if you are interested in refighting World War II, fighting a war against some empire thousands of years in the future, or playing a science fantasy game such as "Dungeons and Dragons" watch the bulletin boards for the time and location of the next meeting. Membership for the term costs 25 cents so you can't plead poverty.

Also on Thursday night was the first Math Pub of the term. Turnout wasn't overwhelming but it was raining and there was at least one house party going on in the village. However, the price was right (free) and the music was good (i.e. a minimum of hard-core disco). So if you weren't there watch the bulletin boards for the time and location of the next one.

The TAKITH column has already been done for the week and my candidate didn't win the honour so here are all the gory details about how this person came to deserve the award.

The almost winner of the TAKITH award is...the envelope please...Jules Grajower!!!...for threatening to sue Kid Paranoid for libel for his first article of this term in which he cut up the chevron. The Kid, when confronted with this threat, immediately caved in to Grajower's every demand and is writing an apology which will appear in this issue or the next. The Kid says that he isn't sorry, just scared. Certainly the article differed from the facts here and there, but the opinions expressed were those of the Kid and him alone. If he thinks that the chevron is controlled by the AIA, (and I think that a lot of other people think so too), he has every right to tell us so without being harassed. Grajower himself was not mentioned in the article so he had no business making such a threat. Besides, I recall reading in the chevron not too long ago that the matINEWS is a fascist reactionary rag. Remember the ancient proverb-"He who lives by the inflammatory article must be prepared to die by the inflammatory article."

While we are on the subject of the chevron, don't forget to get out and vote on May 24 for separation of the chevron from the Federation and for refundable chevron fees.

I think that this article/column has gone on long enough so I'll sign off here until a fortnight hence.



# Federation: Referendum Comment

There will be a chevron referendum this Wednesday, May 24. It was called last term when over 800 students signed a petition calling for a referendum on the question of a separate fee for the chevron.

Out of gratitude for his attempt to obtain student opinion about the chevron, the chevron staff voted to oust (they call it a suspension) Chris Dufault, the chief petition organizer, from the staff of the paper. Of course this happened after 6 p.m., when most of the moderates had left the staff meeting.

The chevron in the past has recommended a refundable Federation fee and have said in their masthead "we have nothing to fear from refundable fees". They also voted 11-2 in favour of a paper separate from the Federation, with its own refundable fee. However, recently, some staffers, notably those who usually support the AIA position, have changed their position and now oppose separation. Perhaps they do fear the possibility of a large number of students withdrawing their fees (perhaps not). Fortunately, this time the staff is not boycotting the referendum, perhaps because they approved the wording. This is, at least, a more responsible attitude than shown a year ago. While the staff officially opposes separation, at least they are participating in this referendum.

It is, therefore, imperative that you vote in this referendum. Though it is being held early in the term, it is just as important as last fall's refundable fee referendum. Both the chevron staff and the Federation are hoping their position will win. The ballots from both terms are going to be counted Wednesday night.

A detailed wording of question A is provided elsewhere in mathNEWS. Last term I voiced my dissatisfaction with the report of the Chevron Investigation Committee. The report is very lacking in the area of future Federation-chevron relations. A number of submissions were not even considered. By recommending that the chevron remain a part of the Federation, with minor constitutional changes, the Committee has done a disservice to the students. I believe that the year-and-a-half-long Federation-chevron conflict can only be solved by great structural changes. These changes include a separate fee for the paper.

I do not believe that government ownership of the press is in the interests either of the press or of the people. The press is not really free when it is owned by the government, as it can be subjected to government control. On

the other hand, the government cannot be accountable to the people, if it must cater to the whims of an unrepresentative press. Government ownership of the press must end at U.W. The chevron must be separated from the Federation. I urge you to reject the Investigation Committee's report and vote for a separate chevron fee of \$2.00 per term by voting for choice 2 in question A.

Question B deals with the nature of the fee (i.e. compulsory or refundable). While I have favoured compulsory fees in the past two referendums, I feel that I must recommend a refundable fee for the chevron. Recent events have made obvious the difficulties that exist if one tries to make the paper more responsive to the students. Attempts to change the paper have failed both on Fed Council and on the staff itself. It seems if you buck the AIA too much, you run the risk of being ousted (or suspended) from staff, like Chris Dufault. The chevron, as it exists is no longer either free or democratic. At least the Federation ensures some democracy by the direct election of councillors by the students. The chevron staff is, however, self-elected. It seems, regrettably, that a refundable fee will be the only way to possibly make the chevron accountable to the students.

I also support a refundable chevron fee for another reason. Unlike the Federation fee, the chevron fee will be a small amount. Therefore, those who take back their fees will do so because they are dissatisfied and really want the fee back, rather than because of the monetary benefits.

One should not be forced to pay for a press that one does not believe in. With a refundable chevron fee along with the refundable Fed fees, you will have a choice. You can refund one fee or the other, both fees or neither. If you support refundable chevron fees, vote for choice 1 in question B.

I also believe the stated chevron fear of administration control is really a red herring. Personally, I feel the administration would only move against the chevron if it had solid reasons and its actions were supported by a majority of the students. I could be wrong, but I feel what the chevron fears more than anything is student control and the loss of revenue caused by refunds. I believe that deep down they really know that they are not as popular as they may make themselves out to be.

The polling station for the Math voters will be on the third floor outside the Math Lounge. It will be open Wednesday from 9:30 a.m. until 4:30 p.m. Like the refundable Fed fee referendum, this referendum is in two stages. The first stage was held in March and total results will be announced Wednesday night. Remember, your voice needs to be heard! Whatever your position, please vote.

J. J. Long

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the legendary 11<sup>th</sup> integral. "But I thought it didn't exist!", said one of the group who had recently taken Math II in period 9.

As he approached it, the Calculus Kid was entranced. It said "Behold, I am the Lord thy integral. Who dares to approach me?" The others were thrown back but the Kid held fast. In that moment was the Calculus Kid enlightened?? Did he attain Buddahood??????

No, nothing so simple. His angular momentum was changed and he was transformed into a higher-order partial derivative with a discovery of the absolute integral. But still he survived. For as the Kid remarked later,

$$\frac{\partial I}{\partial t} = \frac{\partial(4\pi c)}{\partial t} \int \delta^3 r \{ r \cdot \nabla \phi_i + \beta_1 \beta_i \nabla \phi_1 \} \times (-\beta_2 \nabla \phi_2) + [1 \leftrightarrow 2] + \frac{\partial V(r_1, r_2)}{\partial t} = C(\beta_1 \nabla_1 + \beta_2 \nabla_2) V(r_1, r_2) - (c/4\pi) \int \delta^3 r (1 + \beta_1 \beta_2 (\beta_1 \nabla) \nabla Q_1) \cdot \nabla \phi_2 + \nabla \phi_1 [\beta_2 \nabla_1 \nabla_2 \phi_2].$$

When the 11<sup>th</sup> integral had put the Kid through this test, he gave him and his friends a derive home. When they reached the cabin of the late Fibonnacci, the Kid said goodbye to his friends, and rode his trusty derivative Sin X off into the sunset.

$$\text{TH} \sum_{x=0}^{x=n} \sum_{n=0}^n \frac{\partial u}{\partial t} \sum_{m=1}^m \text{ND}$$

## Unclassified Ads

Lost: Brown leather eyeglass case with pentel pencil. If either found, please phone - Tom 884-6634

Wanted: people who have passed at least grade 8 Conservatory music to be in a 1 hour music experiment. If interested, please contact Lynne Beak, Psychology 4037 or phone 742-3829 between 5 and 7pm or after 10pm.

Wanted: typist to type for the Federation Fall Handbook onto the Honeywell system during the months of May, June, and possibly July (in short spurts). Knowledge of Roff and QED necessary. Knowledge of TYPE an asset. Will pay \$3.70 an hour, or can work out pay on another basis. Contact the Handbook editor Randy Barkman in the Federation Office.

**BASEBALL  
NIGHT  
MAY 25**



*Jays' vs Red Sox*

**Got your Tickets yet?**

**BUSES ARRANGED**

**NIGHT GAME  
IN TORONTO**

**Tickets Available In  
Mathsoc Office MC  
3038**

**MATH WEEK**

**Tickets Available In  
Mathsoc Office MC  
3038**

**Semi-Formal**

Due to the large number of requests from math students this term, the Math society announces that there **will** be a Semi-Formal in the summer on July 14th at Bingeman Park. There were few details available at press time, but look to **mathNEWS** for further developments.

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Well, here it is, 10:55 on a Wednesday Morning and mathNEWS is ready for its weekly, bi-weekly in the summer, trip to graphics services to be duplicated and triplicated etc. to a total of 1000 copies to be ready for your greedy little hands by Friday (hopefully). Since nobody wrote into mathNEWS complaining about it, I (We) assume control in the name of the CRC. More about the CRC in a later issue

News that didn't get into mathNEWS this week until now: Mathsoc is sponsoring a Jazz concert in the Arts Theatre on Saturday July 17 featuring Madison Avenue, and a pianist guest, whose name will be announced right here in a future issue. Also, the Semi-Formal will be on July 15, not the 14th as advertised. It will probably be in co-operation with Kin students.

People and other living things who helped with this issue were: akfm(98.6)ueller, the countess, I.R.Writer, fred and wallace, by the way, fred worked last issue and I left him out, dthedmonds, peter k, kid paranoid wrote, and typed? but his article didn't get in (difficulties in syntax), lisa seiler, babysitter, and very special thank yous to bjgregory for helping above and beyond the call of duty (he worked longer than this editor, who crashed around 2:30) and jllong, the phononer and co-editor.

Announcements section: Mathsoc meeting Wed May 24 at 5:30 pm, referendum on the separation of the chevron also on the 24th, and something just in, There will be a feedback session for all 1B students in the Applied Math with Engineering Options co-op program on June 1st at 4:30 in mc 3027.

Next mathNEWS will be next week (a short paper dealing mainly with the referendum. Until then, this is your fuzzy editor saying @@

...cp disconnect