

MATRIX
SOLUTION SPACE
Volume 92, Issue 1

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math NEWS

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Geoff

What has MEF done lately?

Last term, the Mathematics Endowment Fund (MEF) sponsored nearly \$12 000 in projects designed to improve and enhance the quality of undergraduate mathematics education.

The major source of contributions is the refundable endowment fund amount contributed by undergraduate Math students with tuition each term; the amount contributed each term is \$31.42. Over nearly 10 years, the principal has grown to \$1.7 million dollars, which allows MEF to spend on average \$30000 each term. Last term MEF funded 5 projects.

Some of the projects MEF funds are student-initiated. One project allowed 80 students to attend lectures at the Fields Institute for Research in Mathematical Sciences in Toronto in conjunction with the Pure Math Club. Another proposal added study manuals for actuarial science course 2, 3, and 4 exams to the ActSci Club's library.

For the past 5 years, MEF has supported the Midnight Sun project, a cross-campus design and engineering project to build efficient solar-powered vehicles. Over 100 students, many of whom are math students, participate in the design, construction, and racing of the current project, Midnight Sun VII. MEF's contribution of \$7500 will support the purchase of the solar cell array. Additionally, MEF will be funding two undergraduate research assistantships in the School of Computer Science to help determine if UW should enter a team in Robocup 2004. Robocup is a robotic soccer league, where state-of-the-art robots compete, testing the limits of artificial intelligence and robotics.

MEF also supports course initiatives. This past winter, MEF decided to support two undergraduate research assistants to

mastHEAD

Are You Going to Use Your Powers for Good, or for Awesome?

Ah, I smell a new term starting. The grass is growing, the classes have started and students are reading *mathNEWS* all over campus. Soon the issue will be on the internet and people all over the world will be reading it. Eventually it will be beamed into the ether and entertain people across the universe until someone from Omicron Persei 8 gets offended and kills us all.

So with the recent success of X2 at the box-office, we couldn't help but wonder what the production staff here at *mathNEWS* would say when they were asked, "What's your mutant ability?": Jim Morrison (Hair Growth), Kin Fung Pang (AAA every song on any difficulty on DDR like AAaron), Brian DePratto (Pak Chooie Unf), Eric Logan (Master Debater), Diana (Telephathy...Ew! Stop thinking that, you sicko!), Albert (Having a really phat... no wait.), Aaron (Police Evasion), Soo (Manipulating clipboards; buy them already!), Greg Maloney (I can sense free pizza distance of up to 10Km) and Craig Sloss (Proving dominated convergence with a single bound).

And finally, to all the lovely people who provide us with pizza, pop and paper, we send our everlasting thanks.

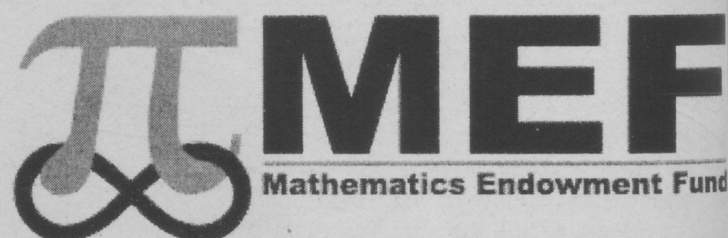
Louis Mastorakos (the power to kill a yak from 200 yards away... with mind bullets!!!)

Krease (That power that does cool stuff)

Ian W. MacKinnon (Super Vision)

further the development of software for SE 101, Introduction to Software Engineering. The software, when completed, will allow students to work with simulations of Lego robots instead of requiring them to wait for the limited lab resources.

You can support the work of the Mathematics Endowment Fund in a number of ways. First, you can continue to make a donation of \$31.42 (10 π) each term you're on campus to MEF. You can submit a proposal for MEF funding, or become a member of the MEF Funding Council, which makes decisions regarding funding. You can also become involved in the administration of the Fund by joining the MEF Board of Directors. For more information, contact the MEF Director by email at mefcom@student.math.uwaterloo.ca, or simply stop by the MEF office, MC 4046.



lookAHEAD

mathNEWS

May 16	Issue #1 goes ga-ga after seeing <i>The Matrix Reloaded</i>
May 26	Issue #2 production night 6:30 pm, MathSoc (MC 3038)
May 30	Issue #2 suffers from bad allergies

Math Faculty

May 16	Course Add Deadline
May 23	Course Drop Deadline Last Day for 100% refund

MathSoc

May 22	Lemonade
Thursdays	Movie Night

MGC

May 20	5:00PM Grad Info Session (DC1351)
Wednesdays	MGC Pizza Days
NOW	Sign up for Grad Photos (There will be none in the winter)

MEF

May. 23	Last Day for Refund Requests
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Co-op

May 20	Posting #2 Expires at 8PM Hand in a copy of your resume package to the drop-off slot by 8PM
May 21	Posting #3 available by 12 noon
May 22	Posting #3 expires at 8PM
May 23	Posting #4 available by 12 noon
May 26	Posting #4 expires at 8PM
May 27	Posting #5 available by 12 noon
May 28	Posting #5 expires at 8PM Employer Interviews begin; prepare to cry

Token Prez Article

BOT

Welcome everyone to the Spring 2003. Summer time is a great time to kick back, relax, play some frisbee, and get involved with your student society. You can find out more about MathSoc, and how you can get involved at our Beginning of Term website, <http://www.mathsoc.uwaterloo.ca/BOT/>.

REPORT

Not only am I the President of MathSoc, I am also a Math/Co-op Feds councillor. This means I will be going to lots of meetings on your behalf. You can check out more about what meetings I have attended and fun things like my report to MathSoc council at <http://www.mathsoc.uwaterloo.ca/prez/>.

Speaking of reports, remember all those course evaluations you did? Well, the Winter 2003 evaluations are now available in the MathSoc office. Just ask your friendly office worker for them.

TALK TO ME

I represent you (well, if you are a undergraduate math student, I represent you). In fact I am writing this article before I go to an agenda setting meeting for Representative Council. If you have any concerns or question about how the faculty is working, e-mail me at prez@mathsoc.uwaterloo.ca, and I will do my best to answer your questions or carry forward your concerns. I am also fairly recognizable, having a flower bleached in to my hair and all, so free to say "Hi."

HAVE FUN!

You are here at the University or Waterloo, your program is hard, but remember to have some fun sometimes. It is summer after all, so get out and enjoy it while you can.

Pht Albert O'Connor
President, Spring 2003

Come on out to CUMC!

This year is the 10th Anniversary of the Canadian Undergraduate Mathematics Conference (CUMC). York University will be hosting this event from May 27 to June 1, 2003. This annual event is a wonderful opportunity for undergraduates to meet leading mathematicians, attend great talks, share their interests in mathematics, and interact with other students from across Canada.

We encourage participation from students interested in any mathematical science from pure math to statistics to computer science. All students in attendance are encouraged to give a short talk (25 or 50 minutes) on a topic of their choice, in either English or French, but are not required to.

Most students who attend the CUMC are able to get funding from their home universities to cover the full or partial costs of the conference. If you're interested in coming and need ideas on how to get funding, let us know.

For more information or to register please visit www.cumc.math.ca or contact us at cumc@cumc.math.ca. Please spread the word to undergraduate students at your university and help us make CUMC 2003 a great success!

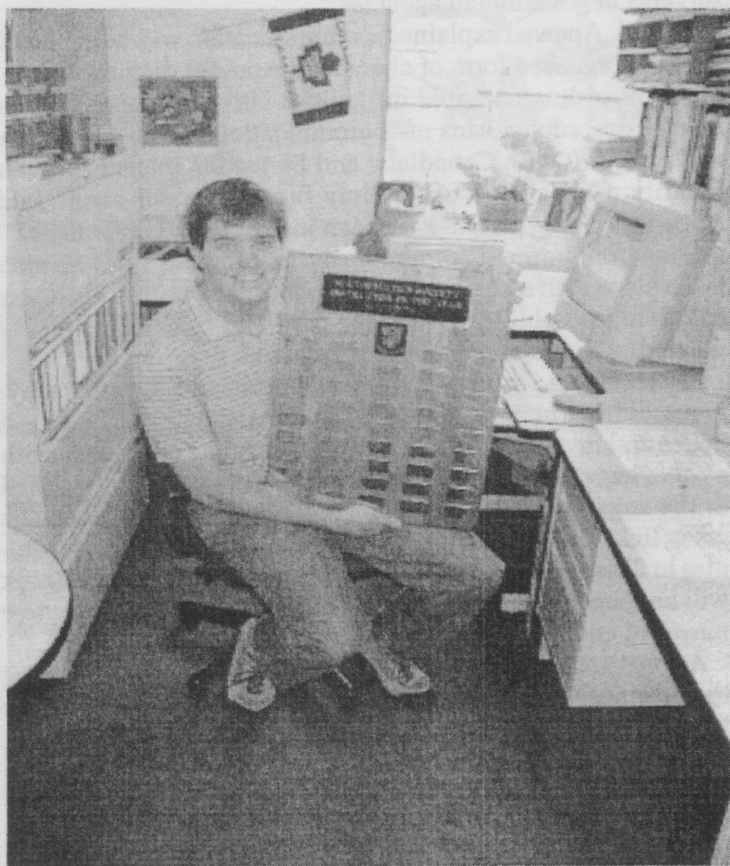
Sincerely,
Joy Abramson
President, CUMC 2003

VPatrix

Instructor of the Year

After dozens of nominations and a long decision period, the Instructor of the Year (IOY) committee from the Winter 2003 term has chosen JP Pretti as the Mathematics Society Instructor of the Year.

Congratulations to JP for his outstanding commitment to students over the past year. JP is an instructor of first and second year computer science courses in both the Math Faculty and St. Jeromes.



Thank you to everyone who nominated an instructor over the past year. Nominations for the Spring term will open towards the last few weeks of the term, so look for notices.

Ian W. MacKinnon
S03 Vice President, Academic

ISSN 0705—0410

mathNEWS is normally a fortnightly publication funded by and responsible to the undergraduate math students of the University of Waterloo, as represented by the Mathematics Society of the University of Waterloo, hereafter referred to as MathSoc. *mathNEWS* is editorially independent of MathSoc. Content is the responsibility of the *mathNEWS* editors; however, any opinions expressed herein are those of the authors and not necessarily those of MathSoc or *mathNEWS*. Current and back issues of *mathNEWS* are available electronically via the World Wide Web at <http://www.mathnews.uwaterloo.ca/>. Send your correspondence to: *mathNEWS*, MC3041, University of Waterloo, 200 University Ave. W., Waterloo, Ontario, Canada, N2L 3G1, or to userid.mathnews@student.math.uwaterloo.ca on the Internet.

Always in need of sleep: Chris Harasemchuk, Louis Mastorakos, & Ian MacKinnon

Speaking English Deemed Offensive to Minorities

Preston Manning Surrenders

The federal government today issued new guidelines to all departments, forbidding communication in either of Canada's official languages. "We have become concerned about the growing number of Canadians whose mother tongue is neither English nor French," explained Red T. Apewad, author of the document. "We don't want these minorities to be offended by having to use English or French when communicating with civil servants at government agencies."

Instead, Apewad explained, communication will be achieved using a "dignified form of charades." Apewad dismissed comments regarding potential difficulties citizens may encounter by utilizing such means of communication. "We feel that this will catch on with Canadians and be just as integral to their identity as hockey and publicly funded health care," said Apewad. "If all else fails, they can just give us their wallets."

Trials for the new communications program have already taken place with mixed results. "An entire caucus from the house of commons volunteered to take part, and they were all very pleased with the outcome," said Apewad.

Not so, says a participating MP who wishes to remain anonymous. "I tried using gestures to ask my assistant to bring me a coffee and my schedule for the next week. She came back with a pot of haggis and a bowling ball." The incredulous MP scoffed at the suggestion that the pilot program would be given the green light, and proceeded to "play dead" for the next five minutes to illustrate his point. "While that may explain what I think will happen to this program, did that seem like a very effective means of communication to you?" he asked.

A constitutional challenge is no doubt inevitable. "It's going to be sooner than you think," said the MP, who happens to be a lawyer. "I might just launch it myself."

"We are confident that these guidelines will withstand the scrutiny of the Supreme Court," said Apewad. "The court knows how to be sensitive to minorities." If all else fails, Apewad says he will recommend that cabinet put the guidelines before the house and force a confidence vote on the issue. "One invocation of the 'notwithstanding clause' is all it will take," said a grinning Apewad.

Aaron Klotz

Do You Want Fries With That?

What's it all about

I'm just about to enter fourth year, and I'm beginning to wonder - was it all worth it? I mean, why did I come to Waterloo in the first place? When I first applied, I had pipe dreams of starting up my own dot.com, and watching the money just flow in. "Of course", I thought, "a degree with the word 'computer' on it somewhere is supposed to help somehow...and my parents always said 'go to University'", so I did. The co-op part was just there to 'help pay for it all'. What a loon I must have been.

After starting my sixth co-op term, I'm questioning if I made the right choice - is there any chance for survival doing for 'work' what I still consider a 'hobby'? Or would it be better to keep it as a hobby and take up another line of work? You should think about it. Before it's too late.

porn*

Fun Unlimited!

Wow! It's the summer term! That means warm days, hot nights and tons of fun in the sun! Kind of like the social events this term... More details will be available as the events approach, but for now here's a brief heads-up of what's going on this term (excluding the Cove Night, which will have already happened by the time you read this.)

- **Cotton Candy Days** — The next one is on June 3rd, then June 24 and July 15. Mmmm sugar! It's good for you, I swear!
- **Lemonade Days** — May 22, June 12, and July 3. Cool off from those summer days!
- **Game Show Night** ... You won't want to miss this one!
- **Pints With Profs #1** ... The chance to chill and drink (alcohol optional, of course) with your profs right around midterms...
- **First Day of Summer Event** — June 20, outside on the green between MC and Biology. Games and fun to be had by all!
- **Sports World Trip** — June 28, \$15 gets you unlimited rides and waterslides, a game of mini-golf, a go-kart ride, and a climb on the climbing wall! What a deal!
- **Beach Trip** — July 5, spend a day chilling on the beach with your fellow mathies!
- **Faculty vs Students Quiz Bowl** — July 8, can the students come back from an embarrassing defeat in the name of all that is trivial in the Fall term? Come and find out!
- **Pints With Profs #2** — The second installment of drinking with your faculty

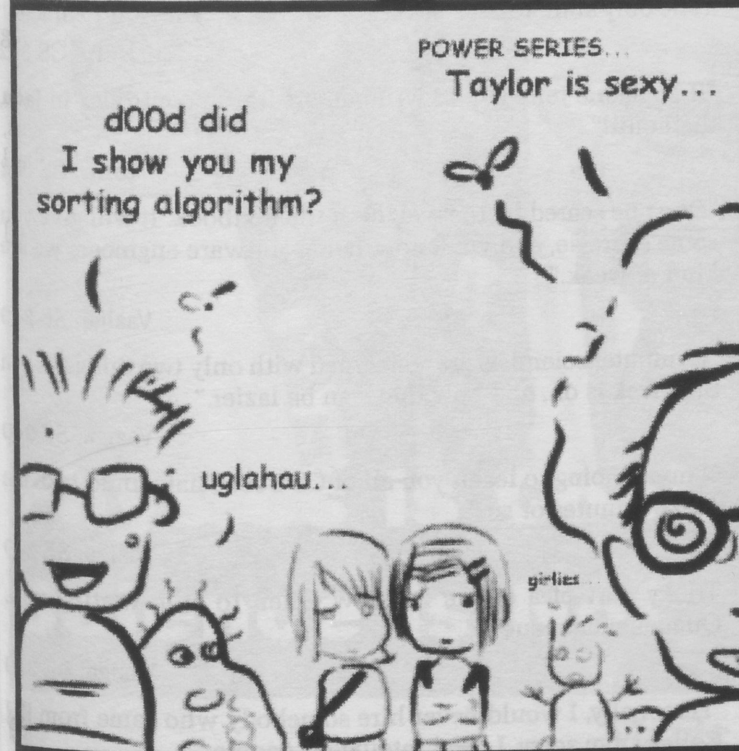
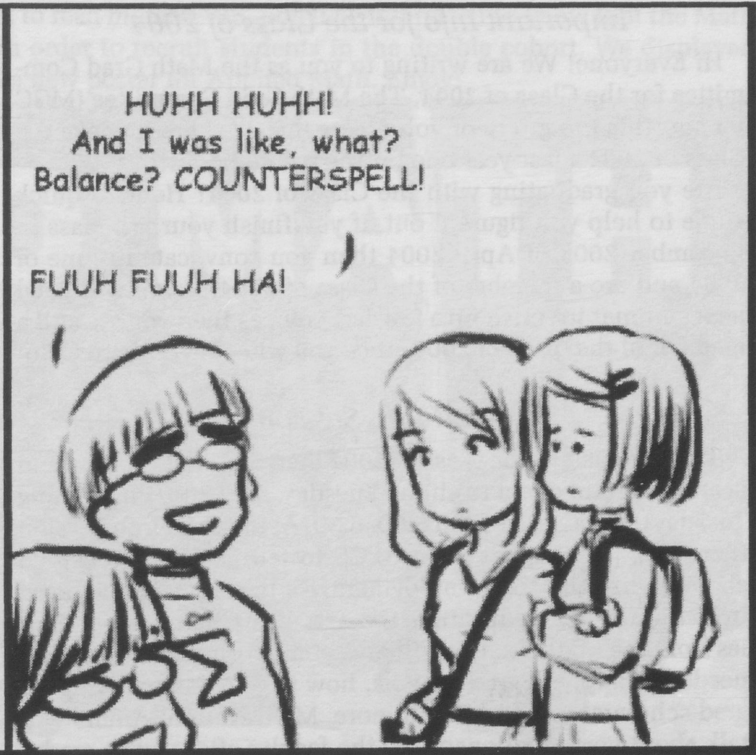
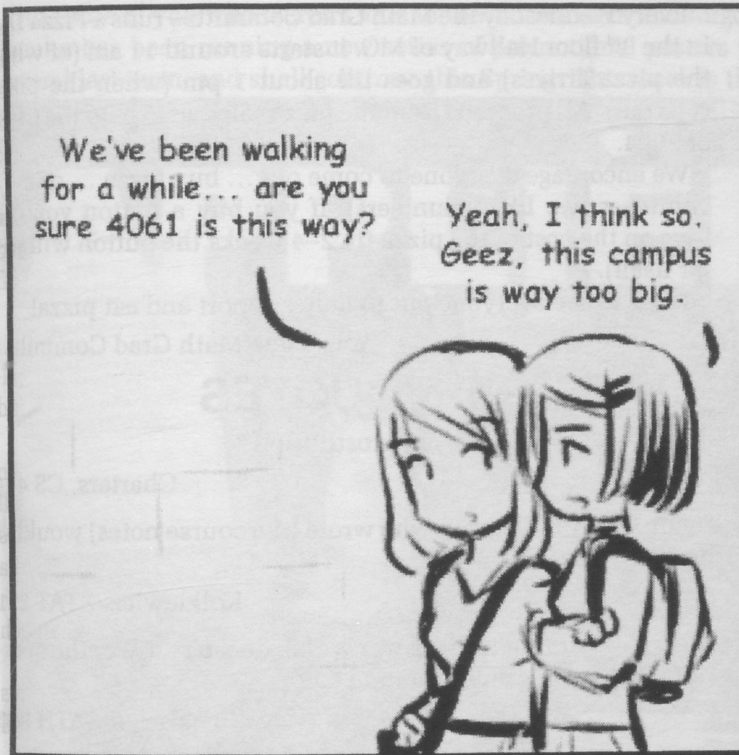
Looks like it's going to be a full term of fun! Hope to see you all out at the events! If you have any suggestions for more events or want to help out with anything, e-mail social@mathsoc.uwaterloo.ca.

Diana (Social S03)



No.01 "Girl Talk" 05/16/03
APRIL AND MAY
NEXT PAGE by Dan Kim / CS 2A
clone-army.org

April & May



Coming Attractions

SARS WARS - The Empire Coughs Back

From the makers of DoubleJar, starring the original cast and crew of Dr. Who, and Mark Hamill as the voice of Guy #2, comes an epic battle between the WHO Empire and Toronto Rebellion. With a two second cameo by Jean Chretien, this stunning romantic-horror G-Rated sequel to the prequel will leave you shocked at the surprise ending: Who is your daddy, and what does he do?

The Matrix: Row Reduced

Should you take the red pill, or the blue pill? Should you use Gaussian elimination, or eliminate Gauss from your monitors? Watch Mr. Anderson take second year algebra in this prequel to *The Matrix*, and find out all the backstory you never wanted to know. Is it really just drugs that makes him think he can fly like Superman?

The End is in Sight!

Important Info for the Class of 2004

Hi Everyone! We are writing to you as the Math Grad Committee for the Class of 2004. The Math Grad Committee (MGC for short) is the group of volunteers that are here to make the Class of 2004's last year one for the record books!!

Are you graduating with the Class of 2004? Here's a quick guide to help you figure it out. If you finish your last class in December 2003 or April 2004 then you convocate in June of 2004 and are a member of the Class of 2004. If you will need next summer to finish up a few last courses then you are still a member of the Class of 2004 since you will convocate in October of 2004.

Grad Info Session

If you are part of the Class of 2004 then the Grad Info Session is an important event to attend Tuesday, May 20th (this coming Tuesday), in DC 1351 from 5:00-6:30. At the Grad Info Session there will be speakers from CECS to tell us how we can go about finding full-time employment. For those of you interested in continuing your education, the Associate Chair of Grad Studies from the Math Faculty will give you information on what is needed to apply to grad schools, how to go about applying for grad scholarships, and much more. Math Alumni Affairs will talk about your relationship to the faculty after you've graduated. Jostens will be there to talk about getting your grad photos taken. Lastly MGC will talk about what events you can look forward to and how you can volunteer with MGC.

Grad Photos

If you want your pictures to appear in the Class Composite and Yearbook you will need to sign up for Grad Photos. The sign-up list will be located on the Class of 2004 Bulletin Board across from the C+D.

SIGN UP NOW!!! You don't want to be left out!

Full Time Jobs

Job postings through Career Services have already started for Full Time Jobs for Grads. There are jobs with many starting dates including January, May, Sept, etc. For more information please attend the 2004 Math Grad Info Session on Monday.

MGC Social Events

The Math Grad Committee is here for you — the Class of 2004. We are trying to organize cool outings to help you meet your fellow classmates and really enjoy your last year here at UW. Currently, we are looking to organize a Pub Crawl, Cheap Movie Night at Galaxy, Cosmic Bowling, Wing Crawl, and other various social outings. If you have any ideas feel free to e-mail usmgc@student.math.uwaterloo.ca. Or if you really have lots of ideas and want to help out let us know ... we can always use more volunteers!

Volunteers

MGC is runs off the efforts of volunteers, and we can always use more help. If you want to help design the Yearbook, organize the Grad Ball, help with Pizza Days, organize Social Events, or anything else you think you can contribute to make the class of 2004 the best yet, let us know! Email us at mgc@student.math.uwaterloo.ca

Pizza Day

Every Wednesday the Math Grad Committee runs a Pizza Day in the 3rd floor Hallway of MC. it starts around 11 am (or when the pizza arrives) and goes till about 1 pm (when the pizza runs out). All proceeds from the pizza sales go to help the Class of 2004.

We encourage everyone to come out ... buy pizza ... or even volunteer (we like volunteers). If you buy a button you can save on the cost of the pizza (in 2-4 weeks the button will pay for itself).

Hope to see everyone out to help support and eat pizza!

Your 2004 Math Grad Committee

profQUOTES

"Love' money — that's not prostitution."

Charters, CS 494

"Quite likely the person who wrote [the course notes] wouldn't pass the quiz."

Kolkiewicz, STAT 231

"Let's give you back an answer which doesn't answer the question. Perhaps it's only irritating."

Dickey, PMATH 360

"The only similarities between Java and C++ are curly braces."

Buhr, CS 341

"If someone tells you to write an air traffic controller in Java then quit!"

Buhr, CS 341

"Don't be scared by the weight of the textbook. It will give you some exercise, and you know, being software engineers we are kind of weak."

Vasiga, SE 240

"Computer scientists are concerned with only two things: when Star Trek is on, and how they can be lazier."

Vasiga, SE 240

"I'm not going to teach you all of CS 246. That would take me 15-20 minutes or so."

Vasiga, SE 240

Tricky part of a queue is know when to stop writing ue's Queueueueueueue..."

Vasiga, SE 240

"Personally, I would never hire somebody who came from [X] College. I'm sorry, I need intelligent people."

Armstrong, CS 246

"The programmers are probably dead already. I'm talking about the 50's and the 60's... They'll be in their 20's when they are programming? Yeah, I say they're dead."

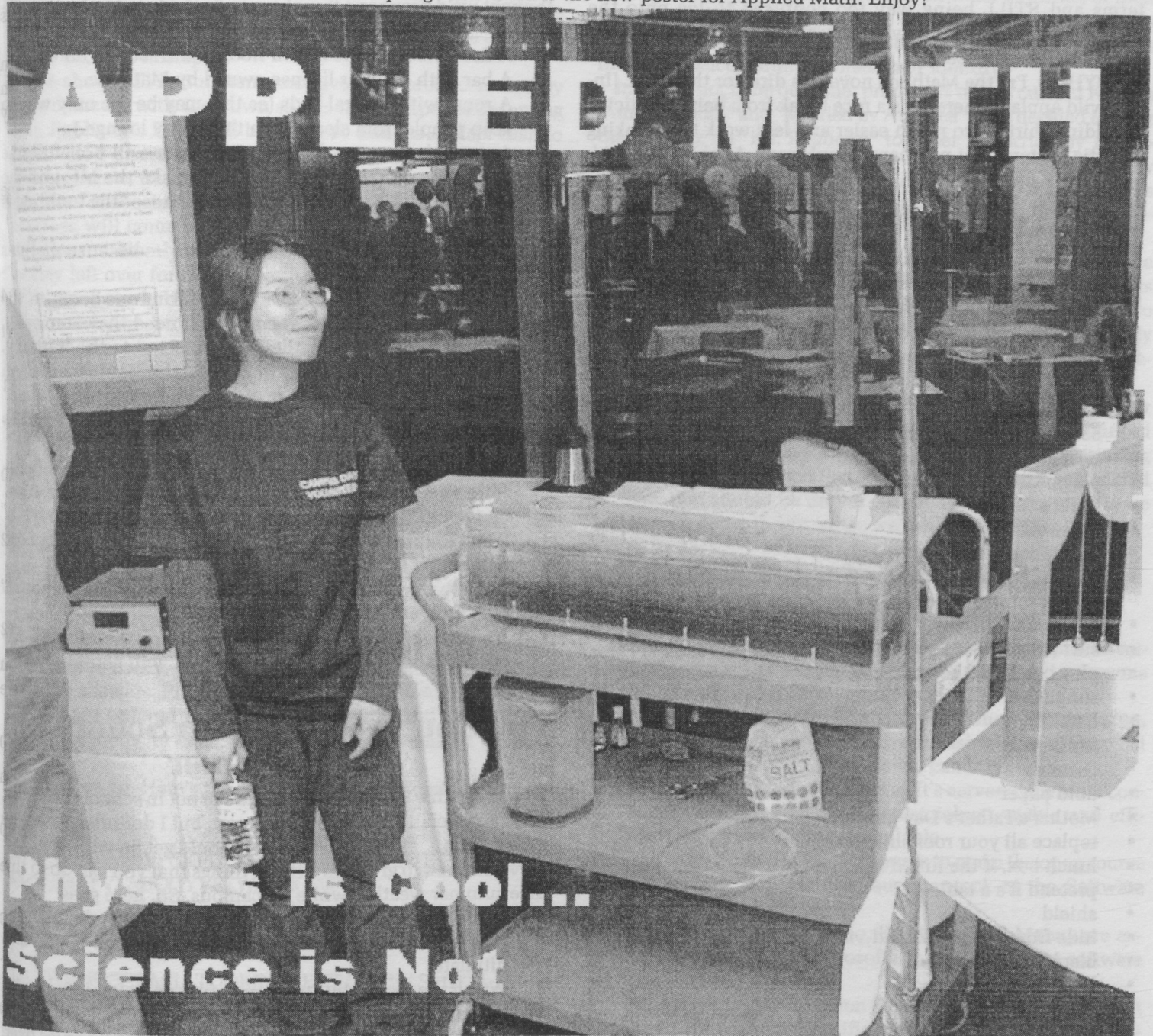
Armstrong, CS 246

"[Statisticians] always think we Actuaries are non-rigorous, but they're just jealous because we make more money than they do."

Hardy, ACTSC 232

Math Faculty Promotional Posters

For those of you who weren't here in the Winter term and forgot to read *mathNEWS*, you'll be interested to know that the Math Faculty has been running a new series of promotional posters in order to recruit students in the double cohort. We displayed several last term, and shall continue this Spring. This week is the new poster for Applied Math. Enjoy!



Ian W. MacKinnon

Magic Loonie

Things that you can do with a loonie!

- Give it to someone
- Give it to an engineer so he/she can have a life
- Hide the loonie somewhere in a hockey rink so that your dream team can win
- Give it to Hockey Hall of Fame as a record of history
- Spend it
- Give it to the editor so that they will put your name in *mathNEWS*
- Save it for another loonie
- With that loonie you just saved, get yourself a sports car (for that *Initial D* game)
- Race your car
- Spend it on *Dance Dance Revolution* in the hope that some girls will admire your skillz
- Get yourself a drink
- Send it to me, and you may get a prize for that

SYSS Mouse with many loonies

Aaaaaaaaaah vi, the spawn of the devil

You know what's really sad? Being on *mathNEWS* for a few terms and STILL being way too confused to log onto the *mathNEWS* system and having a frosh explain how to do it... Sigh. I really can't use vi.

ANYHOO, I'm the MathSoc novelties director this term. [Insert wild applause here.] It's a nice break from being publicity, as folding shirts is so much easier and less work than making gigantic posters [that not many people read. *sigh*] That said, I shouldn't slack too much, I suppose. I'm always looking for new ideas for items MathSoc can sell! Email novelties@mathsoc.uwaterloo.ca if you have a breakthrough idea. Actually, even if you don't have a brilliant idea, are you single, tall, cute, and rich? Then you can call 583-23... Oops, wrong article. *cough*

By the way, check out the cool clipboards we have — for the low low price of \$8.00!

Fun things to do with flashy new MathSoc clipboard

- beat people with them
- turn your table into a cubicle
- play ultimate clipboard
- build a fort
- show off
- go clipboard-bogganing
- buy them in bulk and resell for profit (although I'd probably want in on the deal)
- use as umbrellas
- surf (waves, not the net)
- play baseball (they could be gloves, bat, AND the ball!)
- sunglasses
- hats
- flipflops
- curtains
- hold paper
- Mother's/Father's Day gifts
- replace all your roof shingles
- lunch box, if the lunch is almost infinitely thin, of course
- pretend it's a tablet PC
- shield
- hide from the prof's mad-vision and sleep in classes
- blackboard
- kickboards in the pool
- buy just to shut Soo up
- bribe co-op interviewers
- contraceptive
- create affordable student housing (especially for the fall)
- shoo geese off
- garden
- take over the world
- fly

\$8.00

Master Actuary

Society of Actuaries Course 1 exam fee: \$95 USD

Actex study manual: \$127.50

SoA approved calculator: \$20

Dying during an actuarial exam: priceless

Additions We Would Like to See Made to the MC

With the additions being made to the Student Life Centre, we thought we'd propose a few changes be made to the Mathematics and Computer Centre. Here are a few that we decided on:

- A fire pole from the fourth floor to the second floor.
- A bar with a liquor license owned by MathSoc.
- A room with several beds (as this may be the only way to keep people from sleeping in the comfy lounge.)
- A seventh floor, so that the sixth floor will hopefully be less cluttered (although this might make the MC join the Dana Porter Library as the subject of those "the building is sinking" rumours.)
- Escalators to take the places of stairs — because mathies don't need the exercise.
- A conveyor belt that takes people from one room to the next — because mathies *really* don't need the exercise.
- Instead of only having the DC connected to the building, have a direct path from the MC to the Bombshelter (oh wait, never mind.)
- Reclining chairs in the comfy lounge (why don't we make it the *extra* comfy lounge?)
- Television screens similar to those now in the Used Bookstore that only occasionally display useful information: *mathNEWS* television, anyone?
- Water fountains that release water with small traces of caffeine in it.
- Actually, forget that last suggestion. We want *large* amounts of caffeine.
- A somewhat reasonably-sized room for the *mathNEWS* office (although we think that the MC will get that bar before this ever happens.)

So You've Decided to School in the Summer

Well, another term is upon us and I'm not in school. That's ok. I don't especially miss the school part, but I definitely miss the atmosphere... *sigh*... Oh well, I should get on with my list.

I've decided to give you a list of things that you can do in this nice summer weather while on campus. So, here goes:

- Go outside. Yanno. With the grass and sun and stuff.
- Play a sport. Not a video game sport. A real sport. Like ultimate.
- Watch the local wildlife... try to find an animal that isn't a squirrel.
- Try to see how many buildings you can throw apples over onto.
- Ride a bike. 30km or more. Without stopping. Regularly.
- Go to an on-campus bar. (HA!)
- Paint your entire body blue to avoid getting a sunburn.
- Try to buy your soul back. From me. Heh.
- Jump backwards. 392 times. Without falling.
- Oogle at the local... birds.

Alright, I guess that's all for now. Ya'll have a good time out there in the summer weather, and happy happying!

<http://...student.../~irmacdon>

Mr. Publicity

Hot on the tails of their success with "Mr. Personality", the producers of that show have announced the creation of its sister show "Mr. Publicity". The show will follow a group of network executives and television producers as they try to create a television show that will generate them most media attention in the shortest timespan.

The show will feature ten executives and producers as they each come up with their own shows in the hopes of becoming "Mr. Publicity". Each will be given 10 millions dollars cash to create their show. Expected expenses include hiring of staff, cast and crew, frequent weekend trips to Hawaii and copious amounts of cocaine. At the end of each week, Fox network executives will come in, listen to the progress of the proposals and then randomly choose one for cancellation, keeping any money left over for themselves.

Shot in Beverly Hills, "Mr. Publicity" has already started getting some interest from some of today's hottest producers. Mark Burnett, creator of "Survivor" and "Eco-Challenge", has expressed interest in submitting his new idea to the show. "This show will be totally different from my other shows," says Burnett. When pressed for details, Burnett was forthcoming, saying, "It'll involved stranding people in a remote location where they will have to fend for themselves. The difference is this time, we're sending monkeys in along with them."

The creators of another current reality smash hit "Extreme

Makeover" plan on showcasing their new show "Extreme Takeover" when they appear on "Mr. Publicity". On "Takeover" one ordinary citizen is transformed into an exact duplicate of their favourite celebrity using cutting edge plastic surgery. After a recovery period, the contestant then infiltrates the celebrity's life and, if successful, assumes their identity.

In a rush not to be outdone, producers of two current Fox hits "American Idol" and "Married by America" have decided to enter the running on "Mr. Publicity" together. "Married by American Idol" is going to be amazing. We're already getting Kelly Clarkson ordained in the Church of Scientology and as soon as someone wins Idol 2, we've got a rigorous 2 month rabbi-training program in place for them."

Viewers will also see producers of ratings bonanzas from the past reemerge on the set of "Mr. Publicity". Creator of "Who Wants To Be A Millionaire?" Michael Davies has declared his intent to enter his new show "Who Wants To Bang A Millionaire?". "Mostly it'll be whatever soft-core porn I decide to rent each week", replied Davies when asked what the show would be about.

"Mr. Publicity" creators are excited at all the attention their show is already garnering. In a bold move, they've announced their decision to also be participants in the show. "After thinking about it a bit, we realized that 'Mr. Publicity' is exactly the kind of show that should be on 'Mr. Publicity'. The best part is we know we're going to win, since we're also the judges."

Crypto-Madness!!

For all you crypto-nuts out there, here is a set of unique ciphers organized in difficulty to solve. If you have solved them and want to verify, you can e-mail me at kjrose@uwaterloo.ca with the answers. Please do not ask for hints though. The three ciphers are ordered in increasing difficulty, and use different cipher methods for each. (I wouldn't want to make it too easy.

^_^)
So, here we go. Here's the first cipher of Cryptomadness!

(1)
PVKEWJKWVBVPCPKPDTKPIXQTOKIYVEDATJNXTASJOYEV
KWWJMAYVLABQOYVEKWAPCOWP

Oooh, that wasn't so hard was it? Let's try the next one...

(2) TWDHOSERASLLTDORINOSENT.GHTEE.SMHTA.M
NHAWUNHXIOLNSETTYHAXENX

Tricky, eh? Well, if you got the second one, get ready for some real difficult code-breaking. Here's the final cipher of ver. 1.0...

(3) 21 24 17 1 11 15 25 25 5 17 2 4 18 14 15 5 16 7 11 16 1 18
3 2 24 6 24 14 15 12 23 6 2 9 13 22 24 19 1 23 13 1 23 19 13 23
14 7 20 25

I will give details on what ciphers were used and provide answers in the next issue of *mathNEWS* along with a list of people who correctly answered and e-mailed me with the answers.

.....Kelly John Rose.....

Reasons Why Everyone Should Love Microsoft

Despite the bad rap that Microsoft often catches, for such minor issues as a lack of a unified UI (damn you Apple!), everyone should love them, here are a few reasons why:

- Stable, reliable operating systems: since Windows 95, Microsoft has been consistently releasing some of the most stable, bug free OSES that money can buy
- Robust server products: Microsoft's server software is constantly being hailed as the most robust, stable and efficient server environment available
- Slashdot: if one site has done more to make the open source community look like the laughingstock of the Software industry, I'd like to see it
- Innovative products: Visio, Frontpage and Money are excellent examples of Microsoft's innovation in the software development realm
- Friendly Product Activation Schemes: Microsoft had a great idea with product identification based on hardware; unfortunately, a bunch of open source community whiners had to ruin it for everyone. It makes me wonder, what did the people opposed to this have to hide?
- Passport: MS hit the nail right on the head with this one, nothing sounds like a better idea than keeping people's financial information in one central place, especially when it is on servers running Microsoft's stable, secure server software
- Branding: MS has a great branding scheme now, with .NET, XP and 2003 all being used to describe products, so it is easy to determine which one is the latest version

The thing under the bridge

Ask a Star Trek Fanatic

Dear Star Trek Fanatic,

I'm about to go crazy. Between my six classes, part-time job and my social life, I'm totally stressed out. There's just not enough time in the day for me to do everything I want to do. How can I deal with this?

-Stressed out in St. Louis

Dear Stressed,

The best solution to your dilemma would be to employ elementary temporal mechanics to increase the amount of time in one day. As Lieutenant Commander Data demonstrated on stardate 45367.3, by channeling a tachyon beam through the deflector dish of the U.S.S. Enterprise (NCC-1701-D), one can create localized distortions in the space-time continuum that will result in the desired effect of lengthening the day.

Dear Star Trek Fanatic,

About ten days ago, I was visiting Toronto when I happened to break my leg and I had to go to a hospital to have it examined. Today, I started coughing and I have a fever. What should I do?

-Worried in Wichita

mathNEWS Presents: Pickup Lines for Math Students

With Bonus Contest!

Math students (generally the males) are often known for having bad luck with the opposite sex (or same sex, as the case may be). With this in mind, *mathNEWS* presents a list of pickup lines specifically for Math students. Try these next time you go out, and remember, if all else fails, you can always try sparking a rousing discussion about which editor is better; vi or emacs (emacs all the way!)

The official *mathNEWS* pickup lines list

- If your function is x^2 , I want to be $x^3/3$, the area under your curves
- Hey baby, how about I perform a stack dump to your read buffer?
- Is that an asymptote in your pocket, or are you just happy to see me?

Then we have the more obscure terms that are actually used, but **could** sound dirty.

- How about I perform a sort on your variables, and you can analyse my performance?
- Perhaps you and I could do some double integration?
- I'd like to instantiate your objects, and access their member variables

Since this list is pretty short (and crappy), we are calling upon you, our faithful readers, to help your fellow math students out. The best pickup line will receive a wonderful prize from Brian's magic closet of haunted computer hardware of doom, as well as another random prize. To make things more fun, the lamest entry will receive a Woody Allen movie box set (on VHS no less!). Get those submissions in to bdepratt@student.math.uwaterloo.ca by May 23rd.

Brian "insert witty title" DePratto

Dear Worried,

There is a danger that you may have contracted the Tarellia plague. You should activate your Emergency Medical Hologram immediately, and get him to erect a level 9 force field around you to prevent you from contaminating your fellow crew members. Once the disease subsides, you'll once again be able to partake in everyday activities such as working in the stellar cartography lab and relaxing on the holodeck.

Dear Star Trek Fanatic,

I've been seeing this guy for a couple of weeks and I really like him. However, I'm a devout Catholic and he's Jewish. I would like for our relationship to continue, but I'm worried that sooner or later our religious differences will get in the way. How should I deal with this situation?

-Torn in Tacoma

Dear Torn,

Religious differences can present challenges to relationships but love can overcome those challenges. Differences such as this are particularly prevalent in inter-species dating rituals. For example, consider the relationship between Major Kin Nerys, the wormhole-alien-worshipping Bajoran, and Odo, the atheistic shapeshifter. Their relationship was quite strong, until Odo turned into a puddle of goo and went to live on his home planet in the Gamma Quadrant.

-Eigenvektor

(With a tip of the hat to *The Onion*)

UW Battle Royale

Mathies vs Engineer

Imagine a bunch of UW Mathies and Engineers left on an island somewhere in Lake Superior. There are a lot of weapons lying around and in order to get out alive, all the Engineers must kill all Mathies and all Mathies must do the same on Engineers.

The reason for this is due to budget cuts from government of Ontario. The budget cut is so severe that the President must choose between Faculty of Mathematics or Faculty of Engineering.

This is a really tough choice, for these students are the best of the best, yet the President can only choose a few and must sacrifice most of them to ensure UW's survival.

The two faculties choose their best warrior to fight and more representatives are chosen to ensure a fair fight.

I am a reporter for the scene. First I saw Ian pick up a rocket launcher for himself and grab some grenades for his mates. Quickly he fired his rocket across the field, and at the same time I heard a screaming and saw "TagA ate Ian's rocket." on my plane. A quick start.

"Boy, that was fast." I told my audience on TV watching live.

Then I saw blasts of lasers flying around and I heard someone said "I would plant a C4 at their base and make it a day."

To be continued...

SYSS Mouse
Reporter, *mathNEWS*

mathNEWSquiz

Welcome to the summer squiz! We're your new squizmasters, Craig and Eric. Submit and answer to the BLACK BOX and you can win a fabulous prize, a \$5 C&D gift certificate!

Words that sound dirty but really aren't

Identify the word defined here:

1. The capital of Saskatchewan
2. A small, orange-like citrus fruit from a tree of the genus *Fortunella*, native to southern China and Malaysia
3. To touch lightly; to excite or stimulate as by tickling
4. To grind (food) to a pulp with the teeth; to chew.
5. To crawl like ants, to swarm with moving beings

Graph Theory

1. What is the longest possible path (normally open to the public) through UW buildings that does not require one to go outside or through the same building twice?
2. How many distinct, non-intersecting paths are there from the Comfy lounge to the MathSoc office? (Assume all lab and office doors are closed and locked.)
3. Can the sixth floor of the MC be embedded on the plane? (Bonus marks for creative answers.)

Undergrads and Star Wars

The cartoon series *Undergrads* and the classic movie series *Star Wars* intersect nontrivially. Give two answers to the following questions: one as the question pertains to *Undergrads* and one as the questions pertains to *Star Wars*.

1. What location is referred to as a "wretched hive of scum and villainy?"
2. What character says, "You're all clear kid. Now let's blow this thing and go home?"
3. Identify the speaker: "Your droids. They'll have to wait outside."

Song Lyrics

This category should be familiar. One point for the song, one point for the artist or group.

1. It's just the thought of you
With someone else
It breaks my heart to see
You hangin' from a shelf
2. Under a blackened sky
Far beyond the glaring streetlights
Sleeping on empty dreams
The vultures lie in wait

3. Just because I walk
Like Obi-Wan Kenobi
You people talk
But you don't even know me

4. Somebody once told me
The world is gonna roll me
I ain't the sharpest tool in the shed

Bonus Round

What joke ends with the punchline: "I don't know, but that's not my penguin?"

Your Squizmasters Craig and Eric

You Know You're an Academic Elitist When...

- You think that the Nobel Peace Prize is not a "real" Nobel Prize.
- You tell your friends that economics is not a science.
- At the end of a *mathNEWS* meeting, you tell your staff "if you don't know how to work with vi, the Arts Faculty is *that way*."
- You write your work report on "Why Arts students don't know how to use UNIX."
- You go to great lengths to explain to people that the Faculty of Engineering at Waterloo is only a career college.
- You prefer to get your news from Noam Chomsky.
- You think that a college that attained university status a mere thirty years ago is "not a real university."
- You borrow the textbooks for your classes from the library and study at home instead of going to class, because the stuff that the professor is covering is "trivial."
- You use the word "trivial" in everyday conversation.
- Everything that you have learned in school up to this point, you consider "trivial" (yes, there is a pattern here.)
- You think that Dave Jackson teaches second-year classes at a reasonable level of difficulty.
- You think that "trans-infinite induction" is a topic that should be covered in MATH 235 (Linear Algebra 2.)
- You groan when you hear a professor mention the words "practical application."
- You consider Computer Science and Statistics too plebeian for your attention, so you don't do any of your assignments and squeeze by in all of your required CS and STAT courses with marks in the low 50's.
- You tell people who only take five courses each term that they are wimps.
- You wear your Math Faculty frosh shirts to your Arts elective classes whenever you actually bother going to them.

Greg Maloney

Free Lunch for Old Mid-Term Exams, Coming Soon to an MC Near You

gridCOMMENTS

It's another term, another gridMASTER - 'tis I, Krease, who brings you grids from beyond...actually, I'm in Mississauga, but that's far enough to be beyond anything. Oh well, I'm not in quarantine, so don't worry if you haven't seen me for a while - but you can still send me care packages full of cookies and gummies and...what was I talking about again?

Ah yes, the grid. For those of you who don't know how it works, there's a prize (\$e¹⁰⁰ gift certificate for the C&D) for the winner of the each grid. Winners are announced in next issue.

So, I think there's supposed to be some secret or something in the grey-colored squares - extra points to anyone who can come up with a way that all the highlighted words in the Conventional solution are related (you Cryptic guys wouldn't find much challenge in doing that, would you?).

Hmm...not much to say for the first grid of the term - Don't forget to submit your solutions to the BLACK BOX by **Monday, May 26th, at 6:30 pm** - which just also happens to be when the next mathNEWS production night is.

Krease

Cryptic Clues

Across

- 8 Boba heard party (4)
- 9 Hi, her gland exploded, Scot (10)
- 10 A follower crushed spice with muscles (6)
- 11 Basins used to be the bomb, but changed direction (8)
- 12 Bird camouflaged in hibiscus (4)
- 13 Careen, spin out of control in central area (5,5)
- 16 Praise for cooler contention (7)
- 17 Silver circular lodged on bottom (7)
- 19 Exchange gun for vine without absolution (10)
- 22 The fifteenth evens misdeeds (4)
- 23 Otherwise say wedge is only way to get a word in (8)
- 26 Brat he retrained with inspiration (6)
- 27 Mouse tracks with blood sport (10)
- 28 Picture of first person to commit fraud (4)

Down

- 1 Drunken bonk in cave with porky star (5,5)
- 2 Backing ever after, right, Sal? (8)
- 3 Hinting she botched one glossy (3,7)
- 4 After 2 Down, for example, awe starts naive mysticism (*Sorry for the rotten clue but won't you feel clever when you solve it?*) (3,3)
- 5 Slam shattered offerings (4)
- 6 Bad puns to get the plug out (6)
- 7 Predicate curtailing overbidding (4)
- 14 Market drops furiously, right, old stud? (6,4)
- 15 Link with artless concentration (10)
- 18 Heard Popeye liked her fat (5,3)
- 20 Obviously missing tea too much (6)
- 21 Subject in diva's salon (6)
- 24 "Up" mood spells disaster... (4)
- 25 ...in sacred area (4)

Conventional Clues

Across

- 8 Font (4)
- 9 Drumming (10)
- 10 Smaller (6)
- 11 Blazes (8)
- 12 Smile (4)
- 13 Accumulation (10)
- 16 Romance language (7)
- 17 Cents (7)
- 19 Often (10)
- 22 Flesh (4)
- 23 Pose (8)
- 26 Grand (6)
- 27 Security (10)
- 28 Loaned (4)

Down

- 1 Old keyboard (10)
- 2 Private (8)
- 3 Value (10)
- 4 _____ council (6)
- 5 Destroy (4)
- 6 Wet _____ contest (1-5)
- 7 Approximately (4)
- 14 All of it (10)
- 15 Acts (10)
- 18 Numbers (8)
- 20 Comforters (6)
- 21 Racket sport (6)
- 24 Paddles (4)
- 25 Creep along (4)

