

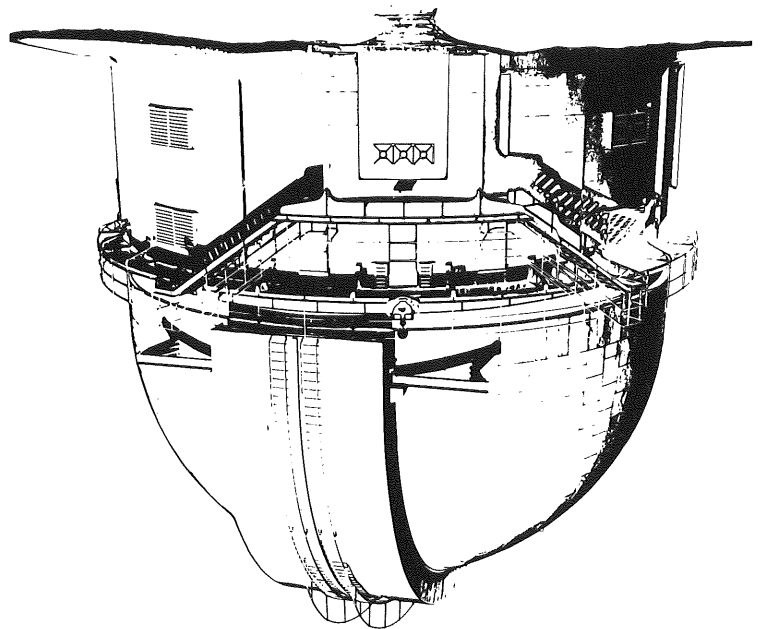
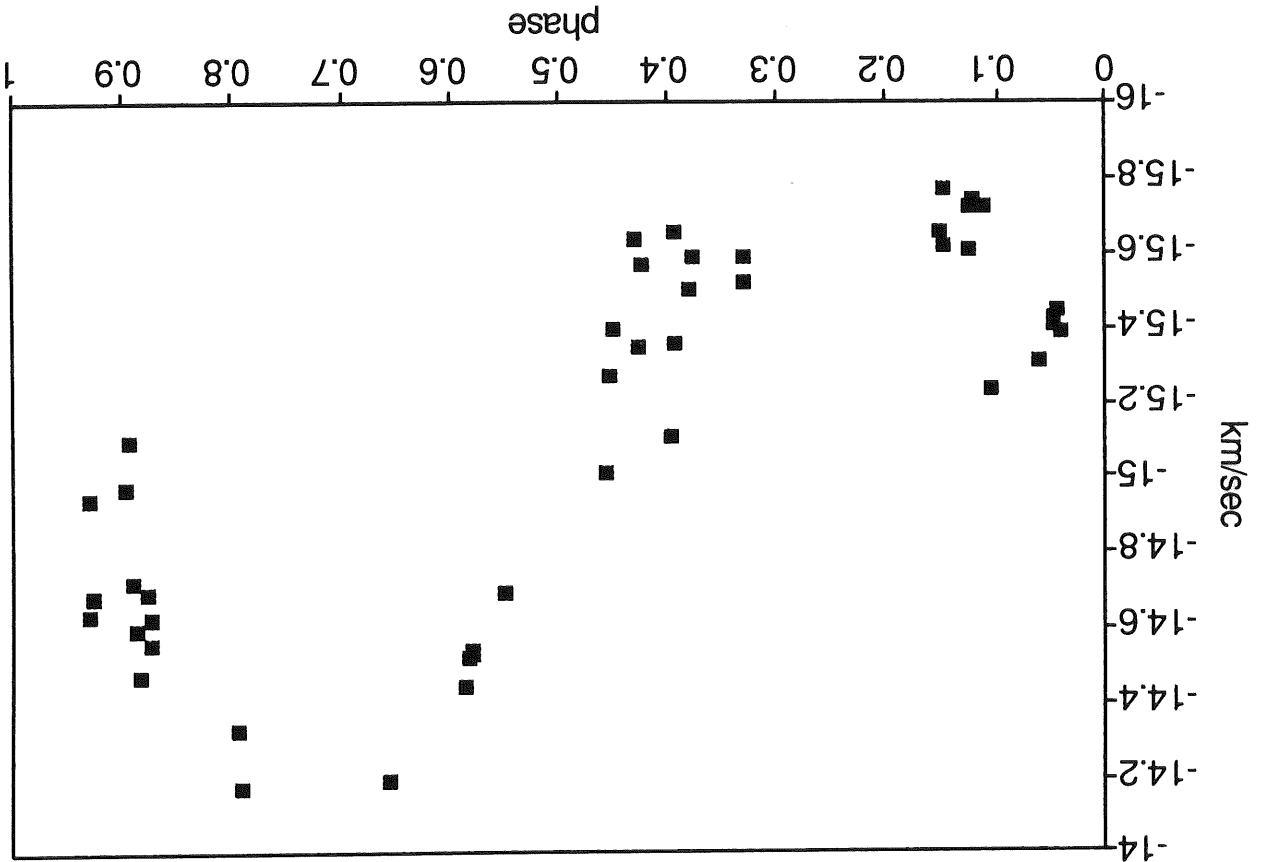
# THE DUNLAP DOINGS

Vol. 26, No. 4

October 1, 1993

REPORTS OF OUR DEMISE WERE PREMATURE

Polaris - 1993



To John Lester, on his promotion to the rank of Full Professor, effective 1993 July 1.

## CONGRATULATIONS

Tom Bolton

Thanks to vigorous recruiting efforts by Bob Garrison and Don Fernie in the Spring, this issue of the DDD has two new columns. GASA Gossip returns under the management of James Brown, and Dan Hudon starts a new column that I've tentatively entitled Dan's Universe. I've added some notes on the activities of the Shop Team which I hope will become a regular feature written, at least occasionally, by someone else. The resurrection of the DDD coincides with the discovery that Polaris' pulsation amplitude has not declined as rapidly as predicted by Fernie *et al.*, (1993 preprint), so the plot of this remarkable result seemed an appropriate choice for the cover. A few of the details of this work are described in the Shop Team News below.

Thanks to all of you who sent e-mail addresses in response to the announced format change, and apologies to all who thought an e-mail format was a good idea. It's nice to know we have so many readers out there. Our apologies to those of you who thought the e-mail version was a good idea because it would save some trees.

The future of the hardcopy version of the DDD WAS bleak for awhile, even though many of us were not happy about the prospect of its demise. It was difficult to see how we were going to do everything we normally do with a workhorse like Ernie Seaquist away for a year. Fortunately, during the summer the solution appeared in the person of John Lester, who offered to take over the AST2000L Current Literature Seminar (yes, the infamous G2000) from me if I would edit the *Doings*. Was this a good deal? I wasn't sure then, and I'm not sure now. Maybe we'll know in a year. At least, this arrangement allows me more freedom to participate in the discussion of the G2000 talks. I can hardly wait.

Surprise! The *David Dunlap Doings* lives, in spite of the editor's gloomy prognosis in the last issue. I suppose the prospect of becoming Acting Chairman and Director can cause that sort of thing.

## FROM THE EDITOR

The Department suffered its third tragic loss in less than a year when University Professor Emeritus J. L. (Allen) Yen suffered a severe stroke on May 26 and died in hospital on May 29. Our condolences go out to his wife, friends and colleagues. A scholarship has been set up in Allen's name, and donations are welcome.

The following is an excerpt for Ernie Seaquist's e-mail announcement of Allen's death.

For those of you who did not know Allen, he was cross-appointed to Astronomy until his retirement from Electrical Engineering a couple of years ago. He had long been associated with the radio astronomy program, nearly from its inception at DDO in the late 1950's. He was a leading member of the Canadian team that obtained the first fringes employing the technique of Very Long Baseline Interferometry in 1967. For this and successive achievements in this field, he was a co-recipient of the Rumford Medal in 1971.

### NEW STUDENTS

We welcome a bumper crop of nine (count them, 9!) new graduate students to the department. They are

- Felipe Barrientos from Universidad de Chile
- Tracy Clarke from the University of New Brunswick.
- Devon Hamilton from the University of Toronto (part-time).
- Katherine King from the University of New Brunswick.
- Gabriela Mullen-Ornelas from California Institute of Technology.
- Cleon Manz from University of Regina.
- Charles Shepherd from the University of Toronto.
- Hye-Kyeong Song from Yonsei University in the Republic of Korea (part-time).
- James Taylor from the University of Toronto.

### AS THE WORLD TURNS – STAFF CHANGES

*Out with the Old:*

As announced in the last issue, Joan Trygve retired from the University at the end of August, thus ending an era in the history of the Department and Observatory. Her contributions to the Department were celebrated with a party at Elmlea hosted by Ernie and Gloria Seaquist on June 25. Fate delivered one of those perfect early summer evenings that are so rare in Ontario, so the large crowd attracted by the momentous occasion was able to sit on the front lawn to hear various departmental notables pay tribute to Joan. Joan received a CD player, some CD's, many flowers and other gifts as going away presents.

### CONDOLENCES



Phil Kronberg began his tenure as Killiam Fellow this past summer. He plans to remain based at the University of Toronto for most of the two year tenure of his fellowship. In June, Phil Kronberg attended the Liege Symposium on Gravitational Lensing, where he and Charles Dyer presented the first determination of a galaxy's global mass using their new technique of gravitational alignment-breaking in background quasar radio jets.

Rick Perley, and his wife Peggy, and sons Daniel and Michael returned to the the NRAO, Socorro, NM, in August after a 5 month stay in the Department, which was sponsored by Phil Kronberg. Rick was on a sabbatical leave from the NRAO, which was shared between the radio astronomy group at Caltech (where he spent the winter months while waiting for Toronto to warm up), and the U. of T. Many of us, including several graduate students, will miss the many lively, and daily interactions with him. A native of BC, Rick has been a prominent member of the NRAO scientific staff in recent years, and is currently Deputy Director of Operations for the VLA. Peggy, a native of the US east coast, is likewise known to VLA observers around the world in her capacity as senior Data Analyst at the VLA.

**COMINGS AND GOINGS**

Don Fernie

Following the early retirement of Joan Trygve at the end of August, the department has been most fortunate in obtaining the services of Linda Tallon in the post of Business Officer. Linda was formerly Business Officer in the department of Slavic Languages and Literature, and prior to that worked in the central administrator's insurance office and also the departments of Mechanical Engineering and Medical Genetics. She is thus well-versed in the byzantine machinations of the University. Her interests are diverse, including running and further study towards a degree. Linda will be located full-time on the downtown campus, a change from the days when Joan had to divide her time between DDO and DA. The Observatory will now be administered by Florence Unwin alone (with some help from the Director and Associate Directors), and in recognition of this I am happy to say that Florence has been promoted to Administrative Assistant I. There will also be some changes in Nella Rupp's duties on campus, and I am also happy to say that she has been promoted to Secretary II.

Tom Bolton

Even though Joan has retired, she hasn't gone far away. In fact, she has been seen at the Observatory reading her e-mail on several occasions since her official retirement. I guess that stuff is really addictive.

After a few months as postdoctoral associate working with Phil Kronberg, Michael Bietenholz has joined Norbert Bartel's VLBI group at the ISTS at York University. Many will remember Michael's spectacular slide show of his 24,000km world bicycle tour at this year's Spring Equinox party.

John and Maire Percy spent most of July in New Zealand. While Maire burned up the fax lines, writing a paper with North American colleagues, John attended two meetings. At the first joint meeting of the Astronomical Society of Australia, and the Royal Astronomical Society of New Zealand, he gave an invited review on *Education in Astronomy: An International Perspective*. The venue then moved from Christchurch to the mountain resort of Hammer Springs for the Fourth New Zealand Photometry Conference, where John gave the keynote address on *Variable Stars, Photo-electric Photometry, Science Education and the AAVSO*. Prior to the Christchurch meeting, he participated in a one-day workshop on astronomy education, for local schoolteachers. In many ways, the visit was an 'exchange' with Peter Cottrell, of Canterbury University in Christchurch, who visited Canada and the Department last July. Canterbury operates the Mount John Observatory, whose long-term photometric and spectroscopic studies of variable stars have much in common with DDO. Peter also left behind tourist literature (and infectious enthusiasm) which would tempt anyone to visit NZ — especially given Toronto weather in July.

Among the participants in the joint ASA-RASNZ meeting were JayAnne English (BSc c. 1989), who is finishing up her PhD at ANU, and Colin Keay of Newcastle University (MSc c. 1965).

John Percy spent a week in Cambridge MA in August, working with Janet Mattei on the NSF-funded education project *Hands-On Astrophysics*. A highlight of the week was a dinner at Chez Sasselov (PhD 1990), and an introduction to the physics of the didgeridoo.

Garrison attended the dedication of the 1.8m Vatican Advanced Technology Telescope in Tucson, Arizona. The telescope is the first to be located on Mt. Graham, and Chris Corbally (PhD Toronto 1984, with Garrison) is the project manager. A dinner was held Friday evening, 17 September, the dedication on Mt. Graham was on Saturday, and there was a Mass for the telescope on Sunday morning. Bob reports that it is the first time he has attended a mass with a dozen celebrants, eight of whom he knows personally. Chris officiated as the Principal Celebrant. Following the Dedication, a workshop (*The MK Process at 50 Years: A Powerful Tool for Astrophysical Insight*) was held, commemorating the 50th anniversary of the publication of the original *Atlas of Stellar Spectra* by W. W. Morgan, P. C. Keenan, and E. Kellman. About 60 people attended, and the discussions were so interesting that everyone attended every session, which is quite unusual for such a conference. Bob Garrison gave the lead talk and also lead the final 3 hour discussion. Other invited talks were by Mihailas, Osterbrock, Richard Gray (PhD, Toronto 1986, with Garrison), Chris Corbally, Eric Olsen (Denmark), and von Hippel (Cambridge).

Garrison attended the Mendoza Symposium in Mexico City from 24-28 August. The topic (Stars, Gas, and Dust in the Galaxy) was broad enough that speakers ranged over many different disciplines and discussed many different kinds of astronomical objects. George Herbig had the task of pulling it all together at the end of the conference. Armando Arellano-Ferro (MSc, Toronto 1978 with Garrison and PhD 1983 with Percy) was the Chair of both the Scientific and Local Organizing Committees.

Ernie and Gloria Seagrist drove to California in mid-July after acquiring a new car for the trip and carefully scouting the route to find a bridge across the Mississippi River that was still open. Because of the floods, they were forced to take a southern route. Ernie is spending a year at Cal Tech on his administrative research leave.

Rumour has it that Don Fernie spent August in South Africa, but since he has retired as editor of this journal, he appears to have forgotten his responsibility to keep it informed of his activities.

Tom and Susan Bolton were in Quebec August 21-29 to attend the International Workshop on The Instability and Variability of Hot-Star Winds at Isle-aux-Coudres, a small island in the St. Lawrence estuary about 90 minutes northeast of Quebec City. The workshop, which was attended by nearly all of the important workers in the field (and a few hangers-on, like Tom) was a great success. The discussions were stimulating and fruitful. By the end of the meeting it was clear that magnetic fields must play an important role in the structure and energy balance of hot star atmospheres.

The participants took Wednesday off to go whale watching near the mouth of the Saguenay River about 90 minutes further down the St. Lawrence. Participants had a choice of transporta-tion: Zodiacs (basically motorized, inflatable life rafts), a schooner, or a large motor boat. They were told to dress very warmly because the water and air would both be very cold. Right and WRONG. The air temperature was a balmy 30 C. They saw several beluga whales, many Minke whales, and one fin whale. Two of the zodiacs also found a blue whale. A good time was had by all, but some of the more warmly dressed were a bit ripe by the time they returned to shore.

The hospitality of the staff at the Auberge where the workshop was held was outstanding, and the food was superb. The organizing committees, which included Tony Moffat (Toronto M.Sc., 1964) and Alex Fullerton (Toronto Ph.D. 1990, with Bolton) are to be congratulated on a job well done.

Tom was in Ottawa on September 17 to attend the Council Meeting of Academy III of the Royal Society of Canada.

*Rob Ivison continues the saga on his travel's with Ernie's (grant) money.*

After Ernie's failed bid to finish me off with a rattlesnake in New Mexico I sought refuge for 10 days in Narrabri, New South Wales, during July. This was seen by some as an attempt to bleed Ernie's grant dry and to surreptitiously double my air miles. True to form I came face to face with a 5 ft male roo on the first moonless night, though this time I'm not sure which of us was most terrified. My first glimpse of the southern sky will be a lasting memory, though my habit of walking along with my neck strained upwards got me into trouble several times.

The Australia Telescope Compact Array is manned by the most humorous, friendly bunch of astronomers that it's ever been my pleasure to meet. The 6 elements of the array and the irrigated land attract some incredible creatures to the area — as well as the roos there were scores of parrots, budgies and other exotic birds. At dawn they would dangle on the old, abandoned wire antennae, jostling for position on the wire mesh only yards from my position in the array control room. The trip was a runaway success, partly because I was lucky enough to land the chief electronics engineer, Peter Hall, and the correlator designer, Warwick Wilson, as my support scientists, partly because the allocation of 4 full days allowed us to experiment and get things

right. Ernie and I extended our continuum survey of symbiotic stars to southern declinations, and also detected the first unambiguous signs of OH maser emission from a symbiotic Mira, *i.e.*, the first symbiotic OH/IR star.

During several trips to the UK (June/July) I gave a seminar about the nature of symbiotic stars at Keele University and visited collaborators at Liverpool John Moores University and the University of Central Lancashire.

## POTPOURRI

### WATCHING THE PERSEIDS

by Stefan Mochmacki

Living in Richmond Hill, I don't usually pay much attention to what's going on in the heavens, but this summer I just could not avoid experiencing nature in a way which strongly reminded me why I became an astronomer in the first place.

In early August, I took my boys and a friend of theirs on a two and a half week cruise around Georgian Bay on my thirty foot sailboat *Somewhere*. After meandering up eastern Georgian Bay, we finally arrived on August 11 at the head of Baie Fine in Killarney Provincial Park, at the eastern end of the North Channel. Baie Fine is the closest approximation to a fjord in this part of the world. At the very head is a narrow channel, ending with a beautiful sheltered cove called The Pool. It is surrounded by heavily forested limestone mountains.

The fine (but rather windless) day turned into a cool and perfectly still evening. The boys caught two catfish, which Dad dispatched and cooked for dinner. People on other boats settled quietly into their cockpit's sipping drinks, while my crew in the cabin raucously exchanged tales of the school year gone by and the school year, alas, soon to begin again. As it darkened, the band of the Milky Way emerged clearly. Finally, I could call up the troops from below, to sit on the cabin roof and watch the spectacle above. They became much quieter (no doubt to the relief of our neighbours . . .), as the meteors streaked across the sky. Seen from perhaps the most beautiful spot in Ontario, in perfect stillness and darkness, the meteors, stars and the Milky Way gave me a new meaning to the Universe, gentler than the passion I felt as a young student but closer.

Next day, we rowed to land and hiked up to Topaz Lake. The boys dove into its clear water, while I sat on its steep bank like a chimpanzee and gorged myself on blueberries.

The boys very much want to return next summer . . .

SHOP TEAM NEWS

by Tom Bolton

For months, Karl Kamper has been trying to find a way to get very accurate radial velocities out of spectra obtained with the échelle spectrograph on our 1.88-m telescope. During much of that time, it has been apparent that the spectrograph was producing much better results than were coming out of IRAF reductions of the spectra. Throughout the summer Karl regaled the Observatory denizens with stories about the shortcomings and peculiarities of IRAF. He would have a new tale of woe at almost every coffee break and lunch hour.

The figure on the cover is the first fruit of his effort and frustration. It shows radial velocities of Polaris measured from the 1993 échellograms of Polaris. These results show that Polaris is still pulsating in 1993, and casts doubt on the prediction by Fernie et al. (1993 preprint) that it would stop pulsating in 1994. Perhaps more importantly, it shows the quality of data that can be obtained from this instrument if the reductions are done carefully. The scatter about the velocity curve is about  $0.1 \text{ km s}^{-1}$  — about as good as anybody has produced without using special precision radial velocity instrumentation. Now, if I can just get Karl to show me how he did it, so I don't have to reinvent the wheel.

This remarkable result would not have been possible without the efforts of a number of people that worked on the échelle spectrograph over the years. These include, John Lester, who obtained the funding and supervised the project to build the spectrograph, Karl, who was responsible for the daily supervision of the project from the beginning, Dave Blyth who built the original instrument, and everyone else on the technical staff who have contributed to various improvements to the instrument since it was placed in service. Thanks to all of you.

A new EBV guide camera was placed in service at the cassegrain focus of the 1.88-m telescope after several months of software and hardware development by Shenton Chew. The new camera is more sensitive than any other guide camera that we've used. Even though it is uncooled, we've been able to use it to guide on stars as faint as 14th magnitude. It can also be used to capture seeing test images. In one test this summer, speckles were detected with the camera. This means that we will be able to do speckle interferometry with the 1.88-m telescope, but Shen will have to write some more software to allow the camera system to write successive images into a three-dimensional array before we can exploit this new capability easily.

The DDO shop team has completed the new camera for the Hogg Telescope at UTSSO to the point that it is ready for testing on the 0.61-m telescope at DDO. These tests are scheduled for the second week of October, and if everything goes well, the camera will be shipped to UTSSO before the end of the year. Karl Kamper, Dave Earlam, Archie Ridder, and John Pimentel have been the major contributors to this project.

The new camera will be a big improvement over the present camera. Its x-y stage is more stable, and it is equipped with a TV camera that can be used for autoguiding. Unfortunately, the telescope may require some work before we can use autoguiding effectively in the declination coordinate. Work is now underway to replace the telescope's secondary mirror with an active secondary that can be used for guiding and correcting for some of the effects of seeing (the tip-tilt correction). We expect this to be ready for installation sometime in 1994.



## GASA Gossip

by James P. Brown

Well faithful readers, summer has passed and autumn is upon us so I guess it's time to tell you all the wonderful things that have been going on around here over the summer.

Let's start with the obvious, the summer softball season. Unfortunately we had another disappointing losing season. We managed to post a 3 and 6 record with one of our victories coming off a default by the other team. It wasn't as bad as the 0 and 9 humiliation we had last year. This year some of our losses were close, but I thought we had a pretty good team at the start of the season. I've racked my brains trying to figure out where the team went wrong. Was it our pitching, our hitting, our fielding? [*Ed. note: Yes!*] The only real problem I found was that we were apparently the only team that was literate. For every opponent we faced this season, not a one seemed to have read the rules distributed at the beginning of the season.

Every team we faced had to be told how to set their batting order, what the safety rules were, and so on. Invariably at some point in the game one of these rules came up and we were forced to say to our opponents "Hey! You can't do that.", at which point they'd profess their ignorance, do their best *mea culpa*, and say it wouldn't happen again; usually after they'd accumulated a few runs because of their stupidity. We also seemed to run into a lot of teams for which these rules were too complicated. It was sort of like trying to explain logarithms to them. No matter how many different ways we explained it to them, they just didn't get it. Given that these teams managed to beat us anyway, I propose for next year that we feign complete ignorance of the rules and play like we don't care if there are any.

The season was not without highlights, so here are a few of the memorable moments I remember:

Best Catch – Dan Hudon made a spectacular spinning, tumbling grab in the outfield that had both teams on their feet and cheering.

Best Catch without a glove – James Wadsley (a cricket player at heart) seemed to live by the credo that catching the ball with your open hand is the only way to play softball.

Best Pitch – Aaron Sigut made a pitch which I was sure was going to be blasted right into his head, luckily Aaron's quick reflexes saved him from a trip to intensive care.

Best Slide – Me. I made a slide into third which left the better part of my right leg completely cut up, but it was good slide. I got called out anyway.

Best Hit – We had a lot of good hitters but Paul Wiegert recorded some pretty monstrous home runs including a Grand Slam.

Toughest Player – Kathy Hayhoe's friend Lydia took a line drive in the shoulder without so much as a beep.

There were plenty of other memorable moments but they usually involved one of us doing something really stupid so I won't talk about them.

GASA sponsored a trip to Centre Island in August to celebrate the end of summer and finish off some of the food remaining from the DDO picnic. It started off rather poorly as some of the fascist guards at the Island seized our supply of lighter fluid. Apparently sensible adult grad students can't be trusted to start a fire with it. I suppose they had visions of us roaming about like South American death squads, dousing innocent bystanders with our precious lighter fluid and setting them ablaze. Alternatively, we might have been tempted to go about starting fires indiscriminately in an attempt to raze the Island, one of Toronto's few remaining natural landmarks, in a fit of anti-environmental terrorism. Perhaps they feel that we should be able to survive in the wild on our own and start fires without the aid of mans' inventions. [*Ed. note: Isn't this sexist?*] Whatever the reason, it was a real pain in the ass to get the BBQ going.

Beach volleyball was very successful, at least until the ball rolled into the lake. Playing frisbee was also fun, until someone almost took it in the face. Football was a hoot, except for the tiny plastic football which was impossible to throw or catch. Softball would have been fun but the sprinklers were on. Soccer was terrific, but only six people wanted to play. When I think about that day, I think FUN, FUN, FUN! We plan to go back at the end of September to do it all over again.

New this summer was a weekly soccer match at King's College circle. Thanks to some dedicated football enthusiasts in CITA and the DA we managed to start weekly meetings which attracted players from all over the campus. Despite some serious injuries, we managed to have some pretty good matchups.

My only commentary is on the difference between the European style of play and the Canadian one. This is for any of you that feel like joining in some time. Canadians learn at an early age how to give out cheap shots, like tripping, elbows, cross-checks, spearing and the like, in hockey, because that's the Canadian way. Other nationalities play dirty in other athletic endeavours. Europeans tend to learn how to dish out their punishment on the soccer field. On more than one occasion I was accosted by one of these European soccer goons and suitably manhandled. They enjoy throwing a good elbow into you, grabbing your arm or giving you a good hip check. Remember that when you come to play. Canadians don't really do that because we don't learn to play that way. We tend to kick and step on other people because we don't know the proper way to tackle someone. Australians are a lot like Europeans when they play, but what can you expect from a country that produces dwarf tossing and Australian rules football as sport. So if you're in the neighbourhood on Sundays around 5:00 PM, do stop by and have a quick game. Medical assistance is a quick phone call away.

Since this is the gossip section, I feel that important student matters should also be addressed to give it an air of respectability. What I'd like to talk about is the department's purchase of a new mini-van. I don't have a problem with buying a vehicle to transport students from downtown to the DDO. My problem is with the cattle car transportation mentality that goes along with it. I think student interests would have been better served if we had bought a Porsche 911 Turbo instead of one of those boring mini-vans. I mean, we would have been the Astronomers from Hell with a cool set of wheels like that. If you want students to go to DDO, this is the car that will do it. How else do you get them excited about driving in downtown traffic? Hell, you'd have so many students cruising to DDO you wouldn't know what to do with them. We'd be dreaming up new reasons for a trip to Richmond Hill. "What? Someone needs an assignment brought up to DDO. I'll do it! (One page at a time)."  
"The photocopier's broken? I'll drive to DDO." "A

shortage of desk space? I'll commute to DDO as long as I can use the DA Porsche." I'll admit it would have cost a few more bucks to go my way, but I know the department spares no expense to keep us, the students, happy.

Nine new students joined us this year. We bid hello and greetings. I used to have a list of their names but I lost it. I can sort of remember their faces but I can't quite put any names to them. Oh well, it probably wasn't important. I just want you all to know that you are welcome here in the department.

## DAN'S UNIVERSE

by Dan Hudon

Fred. I think we should call it Fred.

When somebody at *Sky and Telescope* said, "I know, let's have a contest", somebody else responded, quite sarcastically I'm sure, "What do you want to do, rename the Big Bang???" He was probably drunk too. Nevertheless, this year's biggest contest, that I have yet to hear **anybody** talking about, was born.

A little concerned that this is the politically correct seeking new frontiers, I consulted the latest guiding-light textbook, Peebles' *The Principles of Physical Cosmology*, for another view. There, in the index, the term 'big bang' appears exactly twice. On page 6 he has a paragraph that says, "Okay, so maybe it's not the best name," and on page 40 where it's supposed to appear for the second time, it doesn't. Thus, it appears that our lives don't actually depend on whether the Big Bang is called the Big Bang or something else. Still, everyone loves a contest — even if the prize is only instant fame and glory (as opposed to a new, self-programming VCR) — so what the heck.

A more common name for the Big Bang could serve to take some of the grandiosity out of astronomy and bring it down to a more comfortable level. A new name would manifest itself in different ways. Theorists, for example, in their formalisms and formalities, could call it Frederic. Observers, in their casual parlance, could call it, simply, Fred. The title to Steven Weinberg's popular book (*The First Three Minutes*) would survive the great renaming but Joseph Silk's book title (*i.e., The Big Bang*) would not. A change, however, would certainly enhance the book's chances of being adapted into a Broadway play (*e.g., Fred — The Musical!*).

Or Joe. Joe wouldn't be bad. The Inflationary era would have to be renamed the Grand Inflationary era so that we can talk about G.I. Joe and the aggressive, violent nature of Joe's early development. Of course, before there was G.I. Joe there was Joe Cool. But, Joe Nucleosynthesis doesn't have much of a ring to it. Nor does Fred — although we could refer to the era as "Fred has a Cook-out"). Nancy however, Nancy Nucleosynthesis would be a distinct possibility.

The true motivation for the contest is described in the Focal Point Column in the August, 1993 issue of *Sky and Telescope*. Timothy Ferris complains about how misleading the name the Big Bang is and that such a frivolous moniker does the subject a disservice. He's only the latest to do so. The complaint is made with good reason. As soon as the term is introduced in undergraduate astronomy courses, students are told that they must not think of the Big Bang as an explosion at a definite place and time as the name implies. With a less misleading name, such a detour would not have to be made. Calvin and Hobbes' suggestion of "The Horrendous Space KablOOie" and my own "The Primordial Scream" (after a British pop band), meritorious as they may be, would not help the situation. Since the term the Big Bang is so well embedded into popular culture, we could just modify it slightly to say how misleading it is. For example, we could change it to "The Big Bang\*" (which would cause everyone to say, "Well, what does the asterisk mean?"). Even better is "The Big Caveat Bang, or simply, The Big Caveat. Let's face it, whatever name you come up with for events in the early Universe, you're going to have to explain yourself, misleading or not.

I still like Fred though.

In case there are objections by famous knighted astronomers with similar names, they needn't worry. The Big Bang would only be called Fred on even days of the month. On odd days of the month, in recognition of the growing portion of persons of gender in astronomy (i.e., women), the Big Bang would be called Freda. It is noted that there are more odd days of the month than even days over the course of the year. This will be taken into consideration when the Milky Way is renamed.

## THE BEST(?) OF THE TEA MESSAGE

(Ed. Note: The Tea Message, with its invitation to tea, appears on computers around the department on Tuesday afternoons. The following are a couple culled from the archives — the first nominated by the author, Dan Hudon, at my request and the second nominated by Don MacRae and seconded by me.)

### The First Day of School

Mrs Harbinger finished taking attendance and began telling the class what they were going to do the rest of the morning. Marcie knew that they would have to write about their summer vacation. The first day of school was memorable for the new students and the new teacher but she always dreaded writing that essay. Sure enough, Mrs. Harbinger told them that they would begin with an essay about what they did that summer. A whole page. Marcie had done nothing worth writing about. She hadn't gone to France for a month like Maureen Forrester, she hadn't learned to waterski like Phillip Roth, nor had she gone hiking in the Rockies like Marie-Claire Blas, she hadn't even gotten a new bicycle like Frankie Mahovich. She had gone to the park when it was nice out and stayed home to play with her dolls when it wasn't. Sometimes, for a change, she took her dolls to the park and played with them there. Marcie stared out the window as the rest of the students wrote furiously. She considered handing in a blank sheet of paper. Mrs. Harbinger told them they had ten more minutes to finish. At last, Marcie began to write:

"After I got back from the moon, I was so tired that I slept for three weeks straight. When I woke up, the Queen had called saying that she wanted to have tea with me. So I did. She makes good crumpets. And then . . ."

Tea and cookies in the Astronomy Lounge at 3:30pm.  
Tell us about your summer vacation. (Bring your cup.)

From hudson@morred.astro.utoronto.ca Tue Jul 27 13:00:26 1993

To: cita@vela.astro.utoronto.ca, maildis@vela.astro.utoronto.ca, summer@vela.astro.utoronto.ca  
Subject: \*\* Tee nd Cookies! in the lounge at 330pm \*\*

so i ws out logging some old-growth forest on the weekend, you know, the lst remaining ones in Cnd, because i need to make some telephone books for jpn nd germany, tht's right, i sid telephone books, nd whatever is left over i'm going to hve it come out of lser printers ll over metro nd if there's nthing left i'm going to make flyers out of it for some pizz joint nd so there i ws making pots of money because the stock is wy up because the telephone books re in gret demand nd — nd even the BC government bought more shres recently — nd everything ws going gret nd then i go nd hyperextend my finger — my pinky — trying to lift one of them big ol' trees — dmn those suckers re heavy — they sure don't grow 'em like tht anymore xclmition mark. so now it's got splint on it — thanks nell — nd i cn't hit the first-letter-of-the-lphbet key or the left shift key without lot of bother, so s you cn see, i int bothering. i guess tht's why ths message is bit shorter than most.

bring your mcmilln bloedel portfolio.

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