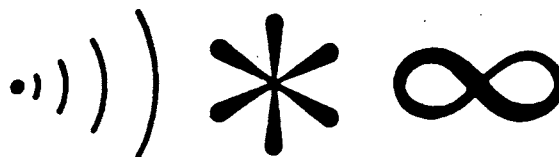


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physics astronomy math



P-A-M BULLETIN

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MESSAGE FROM THE CHAIR

Your Chair-Elect, Ellen Bouton, and I have recently returned from the SLA Winter Meeting in Los Angeles that was held January 26-29. Whew! We just managed to miss most of the influx of Superbowl fans. Our meeting schedule was packed, so I'll just cover the high spots.

The PAM Division and its use of the SLA-PAM listserv was prominently mentioned by Hope Tillman, SLA Networking Committee chair, in a speech to Winter Meeting attendees detailing potential benefits of Internet use to SLA as a whole.

Visioning--I still haven't found it in any dictionary--but it's a process set in motion by Association President Scott to elicit members' collective visionary thinking on where SLA should be headed. Refer back to your September 1992 *Specialist* for full details. We, the assembled Division/Chapter leaders, contributed to this process.

Highlights from the Board of Directors' agenda: 1. PREPS Commission Action Plan & Timetable was approved. It is a sweeping document covering recruitment to the profession, input in library school accreditation, and professional standards. Down the road (Fall 1994) a statement of "Standards for Special Libraries" will be presented for membership approval.

2. The Special Committee to Review Association Finances presented a sobering document that essentially calls for more

priority setting among SLA's various program initiatives, particularly in light of its financial constraints. Is SLA trying to do too much? The report suggests that SLA enter a retrenchment phase, given that the membership rejected a dues increase two years ago. By the way, we also saw figures that SLA is on target to increase its membership by 2%.

3. A staff-drafted Membership Information Policy governing the use and transmittal of unit membership records was voted down by the Board, at the urging of Division/Chapter Cabinets. The policy will be rewritten with input from Divisions and Chapters.

4. SLA staff have been instructed to implement an option for paying dues by VISA or Mastercard.

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Other notable points of information:

*We will soon be able to e-mail SLA Headquarters; the Internet address will be SLA1@CAPCON.ORG. Please watch *Specialist* for a FORMAL announcement.

* Our individual e-mail addresses will be incorporated in *Who's Who*; the data are being gathered through the recent renewal cycle. Did you supply yours on the form?

* SLA has a new chapter, Arabian Gulf, with 40 members.

Cincinnati conference plans are almost finished. We are co-sponsoring a session Wednesday afternoon with ITE, M/M, and NUC called "The Emerging Electronic Publishing Medium." Four speakers have been enlisted for a panel, and there should be time for questions from the audience.

The Open Houses will be held on Monday, Tuesday, and Wednesday nights. No PAM-sponsored field trip is planned, but there are trips to OCLC, Chemical Abstracts, and Battelle Labs on Thursday.

PAM Program:

6/7 10:30 am Astronomy Roundtable

6/7 3:00 pm Math Roundtable

6/8 7:30 am Breakfast/Business Mtg (sponsored by AMS)

6/8 1:30 pm Vendor Update

6/8 3:00 pm Computer Science Lit Roundtable (with S/T)

6/9 1:00 pm Emerging Electronic Publishing

6/9 4:00 pm Physics Roundtable

Overall, the conference program suggests the Cincinnati meeting will be memorable, useful, and fun. The Reds are scheduled to play two home games during that time and SLA is looking to get a block of tickets.

Finally, I think we shall see electronic publishing and electronic journals as a general theme in Cincinnati, and Atlanta as well.

Carol Hutchins

EDITOR'S CORNER

This month's *Bulletin* is a little longer than usual, with conference updates, recognition of PAM members in the news, and even library humor (not an oxymoron!). A huge Thank You! to all who have contributed these items. Please keep the information flowing in. I especially encourage you to share your professional accomplishments, awards, publications, etc., in the *Bulletin*. We are all extremely interested in what our colleagues are doing!

Janice Griggs

PAM BULLETIN

The *PAM Bulletin* is published by the Physics-Astronomy-Mathematics Division of the Special Libraries Association. The *Bulletin* is issued four times a year: August, November, February, and May. Articles should be submitted in ascii format if possible to the bulletin editor by the announced deadline of the next issue.

Subscriptions are free to PAM members and retired PAM members. Nonmember subscriptions cost \$9.00 per year. Checks should be made payable to PAM-SLA and sent to the editor:

Janice Griggs, Head
Mathematics Library
310 Vincent Hall
University of Minnesota
Minneapolis, MN 55455
(612) 624-9395
griggs@math.umn.edu

**DEADLINE FOR NEXT
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ASTRONOMY NEWS

The Virtual Library and Perspectives on Interlibrary Loan

The virtual library, where all text is accessible via scanning technology and telecommunication links, is a dream of the future. The traditional interlibrary loan (ILL) system is the current reality. Fax and e-mail, components of the virtual library, are with us today. I wondered what impact fax and e-mail are having on the ILL system. What follows is a summary of the responses I received to survey questions I distributed prior to the 1992 SLA Conference.

The reporting libraries indicate that so far fax and e-mail have not had a negative impact on interlibrary loan. A major division is noted between "stand-alone" astronomy libraries and those that are part of university library systems. Astronomy libraries affiliated with university libraries usually do not handle ILL requests directly. This fact created a bias in my questions that was pointed out by Carol Hutchins (formerly IU) who commented, "I don't feel I can really respond to all this, as I sense your questions are posed very much from the free-standing astronomy library perspective. We are part of a large library system for interlibrary loan. And even for us, in that context, yes demands are on the upswing. Demand going up, but basically no real change to the way ILL is handled from a staffing perspective."

The following abbreviations have been used:

CFHT: Canada-France-Hawaii-Telescope Library, Liz Bryson
IU: Indiana University, Swain Hall Library, Carol Hutchins
IfA: Institute for Astronomy Library, University of Hawaii, Kathleen Robertson
LOL: Lowell Observatory Library, Antoinette Beiser

LPI: Lunar and Planetary Institute Library, Fran Waranius
NRAO: National Radio Astronomy Observatory Library, Ellen Bouton
UCLA: UCLA Engineering & Mathematical Sciences Library, Bruce Pelz
USNO: US Naval Observatory Library, Brenda Corbin
UM: University of Minnesota, Science & Engineering Library, Sandra Moline
UTLA: University of Toronto Astronomy Library, Marlene Cummins
UW: University of Washington, Physics-Astronomy Library, Martha Austin

General Comments:

NRAO: We do almost all our ILL through OCLC, which is an excellent automated system with which I have absolutely no complaints. It is efficient, easy to use, and fast enough to meet our patrons' needs.

1. Net borrower or a net lender? Does your library borrow or lend more via ILL?

Net borrowers: CFHT, IfA, LOL, LPI
NRAO: For years we were a lender (about 4 to 1). With the advent of two major projects (Green Bank Telescope, Orbiting VLBI) this has reversed and we now borrow more than we lend.

Net lenders: USNO, UCLA
UM: Overall, we are a net lender. We don't handle the requests directly here. All are sent to a central office. I don't have stats on borrowing or lending broken out by subject.
UTLA: Probably balanced, although we get more requests through the formal system.
UW: Since I don't deal directly with either the borrowing or lending, I have no figures for the Physics-Astronomy branch, but the ILL system apparently runs about 90% lender vs. 10% borrower.

2. Increase in ILL requests received?

Slight increase: CFHT, NRAO
LPI: Demands on us are staying fairly stable and we hope we are not overburdening some of our friends in

astronomy libraries who have been most helpful over the years. So far number of requests is not a problem.

Yes: USNO, UCLA

UW: Our formal requests via our ILL system increased heavily a few years ago when the WaU catalog became widely available through OCLC. (We got a request from Florida State Prison for almost all our black hole books.)

No: UTLA

3. Are e-mail ILL requests increasing in volume?

No: CFHT, NRAO

Yes: USNO

LOL: I do 95% of my interlibrary loan requests via e-mail. I try to hit the astronomy libraries in Tucson first. I receive 95% of outside requests for interlibrary via e-mail also. Demands don't seem to be any greater with e-mail.

E-mail ILL requests not accepted: UCLA

UM: We don't accept e-mail requests directly. All must go through ILL dept.

UW: So far have managed to avoid direct ILL requests via e-mail by having a personal account only--no library account yet. If we do start getting direct requests from off-campus borrowers, they will be referred to ILL.

4. Are e-mail requests received in an easy-to-handle format?

Yes: CFHT, NRAO, USNO

LOL: E-mail requests are the primary way we receive ILL requests. The format is easy to handle...obviously a lot less formal than traditional ILL forms.

LPI: If people use our online request program we get all the information we need. Most other e-mail requests from librarians have all the info needed. It is the casual request, usually from a scientist directly, that usually requires a follow-up to get all information.

5. Is the volume of ILL requests a problem for your library?

No: CFHT, LOL, NRAO, UTLA

6. How frequently do you receive requests for FAX delivery?

CFHT: About one request per week for article to be faxed.

LOL: Articles are almost always faxed to the requesting libraries unless the length is extreme...I fax ILLs whenever possible.

Usually the requesting library would prefer them to be faxed.

LPI: Most frequently the request is for a fax. Note AMIGOS new interlibrary loan code is recommending fax for items under 10 pages.

NRAO: Rarely.

USNO: About 5% of the time.

UM: Fax is sometimes a problem. Sending libraries will fax articles to ILL and the quality is so bad that we have to ask sender for photocopies.

UTLA: Infrequently

7. Do requests for FAX delivery present a problem?

No problem, if the article is not too long:
CFHT, LOL, NRAO, USNO, UTLA

8. Are your library's ILL requests increasing? (Over the last several years, has your library been the borrower on an increased number of loan requests?)

CFHT: Volume not constant; dependent on current population of researchers. Last year, demand for articles was higher than this year.

Yes: LOL, NRAO, USNO, UM, UTLA

9. Journal cancellation impact: Have journal cancellations increased the number of loans your library has sent out?

No: UTLA

CFHT: Journal cancellations have been of nonastronomy titles.

NRAO: Our increased ILL requests reflect the several NRAO projects involving new technologies and techniques outside our

normal collection area.

USNO: We have no cancellations as yet, but will very definitely have them in 1993.

UM: So far journal cancellations haven't made too much difference. That will change.

Yes: LOL

10. Does the advent of new technologies require any changes to the formal or informal ILL protocols?

CFHT: I believe that there is a strong demand for an increase in the speed of article delivery. Faxed delivery has become a necessity. The informal PAM network is timely and indispensable. Traditional university ILL service is too slow. I have used Information on Demand, a commercial service, to ensure quick turnaround. I don't have access to the OCLC network. I do have access to UnCover2 (which can supply faxes of recent articles) via University of Hawaii's CARL OPAC. However, although I've established a deposit account, I haven't used it to date.

IU: This is a complex issue. I do indeed harbor feelings that it's time to restructure interlibrary loan. It's too slow the way it is now, and it takes no advantage of decentralization possibilities. I do a fair amount of document exchange outside regular ILL protocol, with partners at Purdue and elsewhere, especially PAM compadres.

LOL: E-mail has changed the way we have requested ILLs in the past. It is much less formal and much faster.

LPI: We are certainly using far fewer ALA forms and more OCLC and e-mail requests, both as a borrower and a lender. Fax also allows for quicker interchange of materials. I wish libraries from whom we borrow materials would indicate a street address instead of just a name or a PO box, so we could return materials by UPS. It is much easier for us to use UPS than the post office.

NRAO: For a small informal library like ours, probably not at this time. For larger (e.g., university) libraries, OCLC ILL still seems to function well; I believe the issues for these libraries are currently more of

volume than of technology.

USNO: Not really; keep the informal network active. This is by far the best way to communicate and exchange information. However, I hope we would all be reasonable and spread the requests around to various libraries. Don't hit on the same library all the time.

UM: New technologies will almost certainly require changes to formal and informal protocols. We do almost nothing by way of "informal" borrowing or lending.

UTLA: Probably, but I can't be specific since we don't do that much ILL either way.

UW: Borrowers need to be aware that since there is a formal ILL system still very much in place that they should use it when possible to avoid overloading poorly staffed branches, etc.

Kathleen Robertson

MATHEMATICS NEWS

Infamous Barbie May Be a Treasure

The "Teen Talk" Barbie who became infamous for uttering the phrase "Math class is tough" may be a treasure. In mid-October, the Mattel Co. offered to replace the guilty Barbie doll, its first such recall in 33 years. In Canada, the number of recalled Barbie dolls was zero. In the United States, only five Barbies with a math aversion have been turned in for replacement models. People are hanging on to the Barbies because they are worth a bundle. "They're not turning it in because they know it's going to be a collectible," said Evelyn Burkhalter, curator of the Barbie Hall of Fame in Palo Alto, California. Collectors of Barbie dolls claim the doll will be worth several hundred dollars in a few months.

Each "Teen Talk" Barbie is programmed to utter four of a possible 270 phrases. Thus, according to Mattel, customers have less than a two percent chance of getting the talking Barbie that hates math. Further

increasing their value is the fact that the company no longer produces Barbies that say, "Math class is tough."

How Do Mathematicians Use Their Literature?

Robert Seeds, Mathematics Librarian at Pennsylvania State University, has been conducting a literature review to determine how much has been established about the way mathematicians use their literature. So far, he has not found as much information as he expected. Most of what he found was identified through *Library Literature* (1950-92). *Mathematical Reviews* has not yielded much. He would appreciate your sharing of citations to any good studies on this topic. He may be contacted at the following address: Robert Seeds, Pennsylvania State University, 109 McAllister Building, University Park, PA 16802. Phone: (814) 865-3714. Bitnet: rss@psu.ias.

Time to Shelve the Library?

"Time to Shelve the Library" is the provocative title of an article in *New Scientist* (December 5, 1992, pp.22-23) by Mike Holderness. The article begins, "Aside from sentiment and atmosphere, why bother with a physical library at all?" and concludes with, "They (libraries), at the very least, remain essential to historians of the pre-computer age."

John Tebo

Mathematics Awareness Week, April 25-May 1, 1993

The theme this year is Mathematics and Manufacturing. I have a one-page announcement that was sent to Math Department chairs, if anyone wants more information. Or you can fax the Joint Policy Board for Mathematics: (202) 462-7877.

Nancy Anderson

AMS/MAA Meetings

The American Mathematical Society and the Mathematical Association of America held their annual Joint Mathematics Meetings in San Antonio on January 13-16, 1993. Discussions from the AMS Library Committee are reported below. Discussions from the Committee on Electronic Products and Services will be reported in the May issue of the *PAM Bulletin*--just in time to get us fired up for the mathematics roundtable, to be led by Ralph Moon in June in Cincinnati. The panel discussion sponsored by the Library Committee, entitled "Publication Costs: Are They Controllable?," will be published at a later date as I am still awaiting permission to quote from all of the panelists. Papers were presented by Edward Block, Managing Director of SIAM; Ruediger Gebauer, Vice President, Editorial of Springer-Verlag; Daniel Jones, Assistant Librarian for Collection Development, Briscoe Library, University of Texas Health Science Center; and David Rogers, System Director of *Mathematical Reviews*.

This year the AMS offered a special \$30 registration fee to librarians. The Library Committee realizes that even with this reduced registration fee, it is hard to justify the expense of traveling to a one-day meeting. Thus, we are going to do something about it--read on!

AMS Library Committee Discussions

The Library Committee met from 9:00 to 11:00 am on Thursday, January 14. Librarians present were Nancy Anderson (co-chair), Dorothy McGarry, and Mary Ann Southern; mathematicians were Jim Rovnyak (co-chair), Dick Askey, and Keith Dennis.

1. NSF page charges. The AMS Library Committee responded to a call from NSF to express views with respect to NSF revising Section 517 of the *NSF Grant Policy Manual*, which sets forth NSF policy on payment of page charges for scientific

journal publications under NSF grants. The proposed change would eliminate the present prohibition to journals operated for profit. If adopted, NSF policy would no longer distinguish between journals by profit-making organizations and scientific societies (or other nonprofit organizations) for purposes of allowing page charges.

The Library Committee drafted a response which emphatically opposed allowing commercial publishers to collect page costs from NSF grants. In fact, the committee feels that author payment of page costs should be abolished totally for the following reasons: (a) It is outmoded and, in mathematics, collected unevenly. (b) It is unreasonable to assume that publishers (especially commercial ones) will pass on savings to the principal consumers, libraries. In place of page charges, NSF grant awardees should be encouraged by NSF to make direct payments to libraries to purchase needed materials. (c) Payment of page costs can damage young researchers with limited budgets. The Committee notes that not once during the Library Committee's panel discussion did anyone mention author payment of page costs as a factor in controlling publication costs.

The response also included an amendment proposed by Jack Weigel: There is some evidence that page charges have played an important role in keeping down the library subscription costs for some important journals published by professional societies. Elimination of page charges would result in yet another burden on overstressed library budgets unless the page charge income is immediately replaced by some other source of income for the professional societies.

2. Library survey. The Committee decided that its 1990 library survey should be repeated in 1995. Although the Committee did not agree to a regular 5-year frequency, it did think that during a time when there is so much change occurring, a five-year interval would be appropriate. The new

survey would be shorter and focus on particular topics that are experiencing rapid change, e.g., document delivery, budgets, journals, electronic products. Dennis suggested adding a question on innovative methods of fundraising. Kendon Stubbs will act as a consultant since he has experience preparing the ARL statistics. A subcommittee of Anderson, McGarry, and Southern will review comments received from the first survey to determine how to improve the survey instrument.

3. Directory of librarians. The Committee requested that Jeremy Soldevilla, AMS Director of Marketing, include on E-Math a list of librarians by academic institution: name and title of librarian in charge of the mathematics collection, mailing and e-mail addresses, telephone and fax numbers. This information could be collected as part of the annual survey. In addition, the *Professional Directory* should be expanded to include librarians and departmental library liaisons as well as publishers of mathematics. It was suggested that the *Professional Directory* be part of E-Math. Dennis suggested that E-Math post a Mathematical Marketplace, or catalogs from out-of-print dealers, foreign publishers, etc., and "want" lists from librarians.

4. Program for 1994 Cincinnati AMS Meetings. Yes, AMS is meeting in Cincinnati in January 1994. So if you can't do all you want to do at SLA in summer 1993, just wait! The AMS Library Committee realizes how important it is to bring the three groups of the mathematical community together: librarians, publishers, and mathematicians. Therefore, we are planning several sessions for librarians during the 1994 AMS Joint Meetings in hopes of encouraging more librarians to attend. This is what the Committee envisions:

Friday morning: Open meeting of the Library Committee

Friday afternoon: Program of interest to mathematicians and librarians, e.g., electronic publishing, document delivery, fundraising, MR on Internet; panel discussion of 1.5 hours

Saturday morning: Roundtable discussion for mathematics department liaisons and mathematics librarians

Saturday afternoon: Roundtable discussion for math librarians only (we would talk about more technical issues)

Other suggestions included a real workshop with the publishers. The Library Committee would like to hear your opinions on this. Do you think you could find funding to go to a two-day session at the AMS meetings? What else would you like discussed? Would you be interested in asking your departmental faculty liaison which topics s/he would like addressed? The planning subcommittee for the 1994 meeting is Anderson, McGarry, Rovnyak, and Southern.

5. MathSci on Internet. AMS is currently working on a revised cost schedule for MathSci tapes. If you want more information, contact Jeremy Soldevilla, Director of Marketing, at jjs@math.ams.org. This news prompted the Library Committee to discuss the idea of having the AMS set up MathSci in one place (AMS is considering its own search engine), charging an extra \$1000 (for example), and providing service over Internet. We were all concerned that other than the six institutions that have already mounted MathSci there are probably not too many more out there that can afford the \$25,000. Also, the Committee was concerned that at present all purchasers of MathSci tapes must provide their own software and maintenance. The Committee thinks it makes some sense to have AMS provide maintenance and search software. The Committee is adamant that the six institutions who have developed their own search software receive some kind of rebate if MathSci becomes available on Internet. The questions we would like you to think about are: What should be the price level

for such a product? Flat fee in advance with a variety of fees thereafter? Should the pricing scheme be based on kind/size of institution or should we consider a higher price in order to subsidize the have-nots (either in the Developing World or at smaller institutions)? What kind of search software? Should AMS be responsible for archiving? Please e-mail your ideas/opinions to me at ndanders@vmd.cso.uiuc.edu for the Committee. The Library Committee is interested in discussing where the library fits into this electronic world. Questions that need to be addressed include knowing which document delivery system works best, knowing where the information is archived, and knowing how to access the sources.

6. Survey of information-seeking behavior of mathematicians. The Committee supported the proposal by Anderson and Griggs to survey mathematicians (focusing on active researchers) on how they use libraries and electronic information sources and how they find, use, and communicate mathematical information. Their survey will need to be reviewed by various AMS Committees (Data Collection, Electronic Products and Services, and Library) before distribution to mathematicians.

Nancy D. Anderson
Co-Chair, AMS Library Committee

PHYSICS NEWS

Experimental Gopher Service

Experimental High Energy & Nuclear Physics Gopher Service will allow interactive access to preprints in High Energy Theory, High Energy Phenomenology, and Nuclear Theory. This service works with the mail-based electronic preprint system developed by Paul Ginsparg at Los Alamos and allows you to retrieve papers or abstracts and perform searches of the abstracts.

This service is called "LANL Nuclear and High Energy Physics Information Service" and is available at mentor.lanl.gov on port 70. A related Gopher service that includes a wide variety of physics subject matter is available at granta.uchicago.edu on port 70. The title of that service is "Physics Resources (Experimental)."

For more information, please contact
gopher-admin@mentor.lanl.gov or
gopher-admin@qmc.lanl.gov.

Joe Carlson
T5

MSB283, LANL
Los Alamos, NM 87545
carlson@qmc.lanl.gov

Selected New Physics Journals 1991

Optical Materials, Elsevier

Journal of Scientific Computing

Astroparticle Physics, North-Holland

International Journal of Modern Physics D: Gravitation, astrophysics and cosmology, World

International Journal of Modern Physics E: Nuclear physics, World

International Journal of Modern Physics A: Proceedings Supplement, World

Fractals, World

Physical Review E: Statistical physics, plasma, fluids and related interdisciplinary topics, AIP

Applied Physics Reviews (soon, from *Journal of Applied Physics*), AIP

Solid State Nuclear Magnetic Resonance, Elsevier

Computational Materials Science, Elsevier (includes optional \$60 videos)

Price Changes from Springer

Zeitschrift fuer Physik A from \$1024.69 to \$1735, an increase of 40%

Zeitschrift fuer Physik D from \$914.07 to \$1433, an increase of 37%

David Stern

Physics Journals in the News

"Russian academy makes deal with US company on journals" *Nature* Sept.17, 1992, p.176. AIP and Pleiades Publishing (they do *Penthouse*) are competing for publishing rights to journals from the Russian Academy of Science.

"University wants to buy journals directly" *Nature* Sept.17, 1992, p.179.

"Journals--call for cutbacks" *Physics World*, Sept. 1992, p.17.

An interesting short article in *College and Research Libraries*, vol.53, no.6, p.563-566, written by H. Barschall and W. Haeberli, discusses conference proceedings in physics.

Pat Allen

PiNet

Judy Matthews (matthews@msupa.bitnet) asked PAMnet members about PiNet, AIP's physics information service. Some replies are listed below.

David Stern: *PiNet has proved useful for the following types of information on an infrequent, but unique basis: Russian e-mail addresses, prepublication searching of abstracts in AIP journals, meeting announcements, directory information, job announcements, and quick and dirty SPIN database searching (at no additional cost). I certainly have found it worth the \$140 per year Internet-access fee.*

Kerry Kresse: *There were lots of features that I liked, but was concerned about the costs of Internet and e-mail. I didn't want our lone cd station to turn into an e-mail hub for graduate students. It seemed to me that grad students would be the biggest group of users because they have the least access to computing facilities (especially the new grad students).*

Computer and Mathematics Search Database Discontinued

ISI has decided to discontinue the electronic portion of CMCI at the end of the year. It will no longer be on BRS or with any other vendor. Apparently it will continue as a print product. There are no plans at the moment to merge backfiles and/or coverage with SciSearch. For further information, contact ISI. Thanks to Martha Tucker, University of Washington at Seattle, for informing us.

If you have Physics News to contribute, please write me at libj@jetson.uh.edu.

Jill Hackenberg

COMPUTER SCIENCE NEWS

Reminder! The Computer Science Roundtable at this year's conference is for you, and your moderator is very interested in hearing any and all topics you would like to discuss. What floats your boat? (What sinks it?!!) If something has popped into your mind, it is probably of interest to the rest of us too. A few ideas that are coalescing now: (1) technical reports on the Internet, techreps.wais--Has anyone used it? How? Is anyone trying to use it to do collection development "on demand" vs. pre-need? (2) CS librarianship in the literature (NOT!) Should we publish? What common concerns would be of interest? Should we start a CS listserv? Has anyone signed on for the ACM's new Conference Proceedings program? (3) Librarians from corporate libraries (Apple, H-P, others)--what's important/unimportant to you? Well, I don't want to let all my cats out of the bag. Hope these give you some ideas! Let me hear from you. Many thanks!

Suzanne Bell
Computer Science Librarian, RIT
ssbwml@cs.rit.edu, 716/475-6009

NOMINATIONS 1993/1994

The Nominating Committee, composed of Sandra Moline, Judith Bausch, and Joanne Goode, chair, is pleased to report that the slate of PAM officers for 1993/94 is:

Chair-Elect

David Stern
Physics-Astronomy Library
University of Illinois

Secretary

Pam Enrici
Learning Resource Center Library
University of Minnesota

Additional nominations, accompanied by a written acceptance from the nominee, may be entered by a petition of ten or more members if filed with the Nominating Committee at least 60 days prior to the annual business meeting.

PAM Division Award

Do you know of someone who has made a significant contribution to the literature of physics, math, or astronomy? Can you think of an activity that has demonstrably improved the exchange of information in these disciplines? Time to bring these people to the attention of the PAM Awards Committee. The individual or group to be honored need not be an SLA or PAM member.

If you have any nominations or suggestions for the committee, contact Karen Andrews as soon as possible:
Internet: karen@cs.ucla.edu
Bitnet: ecz5kla@uclamvs
Phone: (310) 825-3983.

LIBRARIANSHIP IS GLOBAL

The US Information Agency is providing funds for study visits by international librarians who wish to work in relevant US libraries. PAM members interested in hosting librarians from overseas for this purpose should contact David Bender, SLA Executive Director, for details.

TENURE, PROMOTION AND REFERENCES: ONE LIBRARIAN'S EXPERIENCE

It all began rather innocently or, perhaps, with some suspicion--Can you provide me with biographies of...? Do you have a librarian to do *Science Citation Index* searches exclusively? Although two different issues, both are of interest, so I am passing along my experience and suggestions.

First, biographies: After some investigation on my part, a pattern emerged. Faculty preparing for the tenure or promotion process were being asked to provide biographies of their "potential" referees. And whom should they ask, but your friendly librarian. Sounds simple enough, but once I began to look for the information, I discovered that much of it simply does not exist. I tried the standard sources for "living" scientists: *American Men and Women of Science* and *Who's Who in America* (using their electronic versions) and my success rate was rather embarrassing. Of course, by this time, I had not one request for biographical information, but six (and each request totaled at least six to eight names). What to try next? I elected to consult with colleagues on the PAMnet listserv to ask for additional suggestions. Many were kind enough to respond and the list I compiled is detailed as follows:

Devaney, Robert L. *A First Course in Chaotic Dynamical Systems: Theory and Experiment*. Reading, Addison-Wesley, 1992. Has some nice biographies of mathematicians and computer scientists.

Mathematical Reviews lists biographies; see the subject classification 01- in the cumulated subject indices.

May, Kenneth O. *Bibliography and Research Manual of the History of Mathematics*. University of Toronto Press, 1973. Note: Michael Woodall (Cornell) is working on a continuation of this work.

Dictionary of Scientific Biography

Dass, B.K. *Mathematics: Who's Who*. Analytic Publishing Co., 1984.

Biographies may be found in the following online databases: MathSci, LEXIS/NEXIS, AMWS, and Who's Who in America.

Biographies may also be found in the *AMS Notices* (especially for Nobel winners), *Current Mathematical Publications*, *Cambridge* and/or *Webster's Biographical Encyclopedias*, *NYT Obituary Indexes*, *Current Biography*, *ISIS* and *Biographical Master Index*.

Virgil Diodato and Michael Tolan. "Mathematical biographies: profiles and sources on 18 mathematicians," *Science and Technology Libraries* 11(4), 9-42 (1991).

Charles Matthews. "Computer revolutionaries: a guide to the literature on pioneers in computing," *Science and Technology Libraries* 11(4), 43-74 (1991).

Biography and Genealogy Master Index (a seven-volume set published by Gale)

Abbott, David. *The Biographical Dictionary of Scientists--Mathematicians*, 1986.

Biographical Dictionary of Mathematicians: reference biographies from the Dictionary of Scientific Biography, 1991.

World Directory of Mathematicians 1990, published under the auspices of the International Mathematical Union.

Women of Mathematics: A biobibliographic sourcebook, 1987.

However, this exercise taught me a valuable lesson in looking for biographical information: employers (be they academic institutions or corporate entities) do not normally support (or require) faculty to provide biographical information to publishers. Responding to publisher requests is certainly low on the totem pole and while researchers do have many tasks and responsibilities, it seems to me that providing this information would be a very simple task indeed. The effect of having the information available would certainly make the "search" process less frustrating and more successful.

There is one bright spot to report: Cartermill, a joint venture of the Dome Corporation of the Johns Hopkins Institutions and Longman Cartermill, Ltd., of St. Andrews, Scotland, has produced BEST*North America, an online database that "...features first person accounts of the research interests and expertise of faculty and staff as well as their biographies, selected publications and research grants." The database already includes more than sixty leading research institutions (academic) in the US and will eventually expand to 100-150. Cartermill will soon make BEST*Europe available; it will be similar to BEST*North America in format. What is also useful about this database is the ability to create a subset that reflects the "research expertise" of those within your institution. Dartmouth has done just that and the resulting database is quite helpful. While I do not have all the details about accessing either database, I do have some descriptive literature and I would be happy to make it available to anyone who is interested.

Second, *Science Citation Index* (SCI) and its use as a tenure/promotion tool: Fortunately, in this case, I was asked to provide an opinion as to its value and I took the opportunity to query my PAMnet colleagues about their experiences and judgment. Below

are their responses. Comments are not in any specific order and they do not indicate any prioritizing on my part. SCG denotes my own comments.

The question posed was: Has the library become regularly involved in the tenure/promotion process by providing biographical information and (more importantly) searching SCI for the number of times each article written by a faculty member has been cited?

Martha Tucker, University of Washington

**Cited articles are entered into the database by only the first author's name. So, if your person co-authored anything, be sure to search by the first author.*

**This is a problem which I have been asking ISI for years: What is the difference between CMCI (the CompuMath version on BRS) and SciSearch? If you look at the journals covered on both, there are differences, but also a lot of overlap. I can't see the rhyme or reason for some on one list and not on the other. Consequently, I have felt that to be comprehensive, you had to search both. The last time I did that, everything I found in CMCI I also found in SciSearch. BUT, I also found a few more in SciSearch, which frankly was puzzling because I would have expected CMCI to be the more comprehensive in math. It also feels like a ripoff--paying twice for the same information. I have talked to ISI about this, but no one there seems (A) to know much about CMCI or (B) to care enough to get back to me with a reason as to why this situation exists.*

**The online database has a "quality control" problem to the extent that they do not catch typos from the references. Therefore, it's a tremendous burden on the searcher to try to recognize those instances of transposed volume numbers and the like.*

SCG

**Using SCI as a tool in this process gives ISI a great deal of power. Since no other*

citation index database is produced, how do we gauge the validity of the SCI data?

**Search cost is definitely an issue; SCI is not an inexpensive tool (\$1.10/minute telecommunication charge + \$66/hour connect time + \$.80 for printing each record retrieved). These charges add up rather rapidly and I am concerned about who is responsible for the cost.*

Tony Stankus, Holy Cross

**There exist virtually no reliable figures for what constitutes a reasonable number of citations for given major specialities. What is known is that there is tremendous variation between specialities and even within a speciality.*

**A number of technical factors influence citation counts in the short run that may not be valid in the long run: papers appearing earlier in a calendar year have a greater chance of being cited than papers appearing later in the same year. "Methods" papers have a high rate of citability in the short run, but "review" papers have the highest rate of citations in the long run. Citations appearing within books are not counted, but citations to books are counted if they appear in journals. Some journal editors prefer to have the latest paper in a field cited rather than the original seminal paper cited, whenever there seems to be a choice or a question of an overlong reference list.*

**Other technical questions pop up: Is a "personal communication" or a "preprint" or an "unpublished manuscript" countable as a citation to an author? Does an author who is one of twenty authors on a paper get credit for one-twentieth of a citation or for one citation? Which citations matter when evaluating a scientist: those done for work at Dartmouth or those done at a previous place? The scientists may well claim that his or her field is slow to gain recognition; therefore the previous citations should be counted when gauging the overall importance of his or her contribution to science. Do self-citations represent an*

attempt to inflate one's citation count, or is it natural when one has an ongoing string of papers in a field and one wishes to show linkage and avoid repetition of the same justification, methodology, etc.?

**Are all citations equal? The passing acknowledgment to an old mentor? The savvy citing of the journal's editor? The correction of an error? Mention in a review article or bibliography published within a journal? The context of a citation is probably more important than its "body count," at least in the first several years. Only in the long run (10 years maybe) do some of these things even out, and then likely only in the positive sense. The presence of a large number of citations relative to a peer group probably means you have a good scientist. The absence may still be problematical.*

**By contrast, citation comparisons of journals that compete with one another have been annually published for at least ten years. Year after year you can see that a given journal, Journal of Biological Chemistry, is more cited than say Biochimica et Biophysica Acta. You can compare the affiliations of the editors of competing journals. You can compare the affiliations of the authors. You get a much better feel for what constitutes a better journal through an "innocence by association" type of thinking. Having a scientist repeatedly get into better journals suggests that he or she is doing good work or is a hell of a consistently successful con-artist, with the likelihood of the former much greater.*

SCG

**The more common an author's last name, the greater risk of not retrieving all records. SCI lists a name only once; thus false retrievals can (and do) occur. Multiple authors with the same last name and same initials will all be under a single author entry; the searcher then spends considerable time determining, via the journal name, which author is the one to be retrieved.*

**Another inaccuracy in the author name occurs when only the last name and first initial are used to index the article (e.g., Baumgartner JE and Baumgartner J will both retrieve articles authored by the same person); this results in a doubling of effort in making certain all articles by a particular author are retrieved.*

While journal coverage is suspect (it is not comprehensive or even in most subject areas), so also is journal selection. ISI documentation clearly states, "The backbone of SciSearch is journal selection. Through an intensive process involving citation analyses, scrutiny by ISI's Editorial Advisory Board as well as recommendations by subscribers and journal experts on ISI's staff, you are assured of access to over 90% of the core information of each of the scientific subject areas."

Clearly missing in the ISI documentation is the following information: how often are new titles added, how quickly are title changes added and what criteria are used to determine which titles are added and which titles are deleted?

As a result, I sent a memo to the Associate Dean of the Faculty, Sciences, noting that I would not recommend using *Science Citation Index* as a stand-alone tool to measure the quality or quantity of faculty publications. Instead, I recommended that a second online database, specific to the subject discipline of the faculty member, also be consulted to ensure a more complete, and perhaps more comprehensive, search. I also attached the comments I had received from PAMnet subscribers.

Finally, I learned "via the grapevine" that using SCI as a promotion/tenure tool at Dartmouth would be left up to the discretion of each academic department. While this may seem more like a nondecision, I am pleased that my evaluation (and yours) was weighed carefully and taken into consideration. I also discovered that many individual faculty were not at all encouraged

about the potential use of SCI across the system and they also made their opinions known to the Advisory Committee to the President.

What have I learned? A great deal and not all of it negative. I would conclude with the following thoughts:

*There is still progress to be made in both compiling needed information and making it readily available (specifically biographical information).

*The use of *Science Citation Index* as a tool for promotion/tenure decisions must be viewed with a "large grain of salt."

Susan C. George
Dartmouth College

THE NEW GENERATION: VISIONS AND OPPORTUNITIES IN NONPROFIT PUBLISHING

Rebecca Lasher of Stanford University attended the second symposium on scholarly publishing on electronic networks, which was organized by ARL with collaborators AAUP, AMS, and NSF and was held December 5-8, 1992, in Washington, DC. The following is a summary of what she considers highlights of a most exciting conference.

The first day of the conference included a trip to the University of Maryland (College Park) where participants used computer clusters to get hands-on experience with telnet, ftp, Internet resources, listservs, WAIS, gopher, and www. In addition, John Black of the University of Guelph discussed the nuts and bolts of worldwide networks.

The following two days were filled with presentations and panel discussions on electronic publishing experiences, economics, and the future. Each meal during the conference offered opportunities

for one-on-one conversations with colleagues in libraries and publishing. Much information was exchanged about platforms, software, formats, copyright, economics models, etc.

The following thoughts presented at the symposium seemed important enough to pass along (not in any particular order):

1. Many people will not have access to NREN; publishers will need to build systems that will allow non-NREN users such access.
 2. Satellites will be able to bring information to very obscure parts of the world. There is no reason to limit the market by location.
 3. Internet does not currently have the bandwidth to support multimedia publications, but it should be available in 5-10 years. Many agree that we will have to pay more for such increased power.
 4. Many of the publishers at this conference have already made the leap from thinking of their publications as print to thinking of them as multimedia. In other words, even though there was much discussion of hypertext and structured electronic documents, the trend is toward hypermedia.
 5. SGML (Standard Generalized Markup Language) was touted as the way to go with structured documents.
 6. Most publishers are concentrating on paperless production. Evidently there are software packages that will allow you to move documents from Word to WordPerfect to typesetting codes. Their software monitors the whole process: submission of the documents in electronic form, refereeing, copyrights, and typesetting.
- There is a package called Arbortext which goes from typesetting to SGML to TeX. Many publishers are using postscript.
7. Robert Oakley, Director of the Law Library and Professor of Law at Georgetown University Law Center, discussed copyright law and its contemporary interpretation and

application. He made the following points.

Copyright law can grow and be adapted to the new technology. The Copyright Act was written to be technologically neutral.

Most people do not understand copyright or know that a work is protected from the moment of creation. However, copyright is easier to enforce if a work is registered with the Copyright Office. Publishers should fix copyright notice on screen or in print.

Oakley's advice to publishers is to secure sufficient rights initially with explicit permission for electronic publishing. If authors retain copyright, publishers need explicit nonexclusive rights to classroom use, conversion to microform, and electronic publishing.

Authors should notify publishers if preprints have been distributed (electronically as well as in print).

Abstracts may be an infringement of copyright if they are sufficiently detailed to allow users not to buy the journal. If abstracts are merely pointers to published works, there should be no problem.

Fair use hinges on the purpose of copying and the effect on the market. Private nonpermanent files may be fair use.

Certain amounts of private copying is inevitable. If costs are lower with electronic publishing, if you can bypass libraries and go directly to individuals, and if abuse is not too bad, it may be profitable.

8. Anita Lowry, Head of Electronic Text Services, Columbia University Libraries, described the problems that working librarians face in complying with the restrictions and conditions placed on use. For example, access may be provided through a site license, concurrent use license (limiting the number of users), perpetual license, or CD-ROMs leased or sold.

Online vendors are not archiving the data. Librarians must decide who will.

Fixation is a legal problem. We need proof that a work exists, which is difficult to determine with electronic data.

If more than one person/entity holds the rights to a work, any one of them may authorize reuse of the work.

If an author retains copyright, the publisher has rights to the collective work; i.e., the publisher owns the rights to the work as a whole. Publishers can reprint the journal electronically as a sequence of articles.

9. Merriam Webster Dictionaries is experimenting with a pronouncing dictionary.

10. Jim O'Donnell, professor of classical studies and coordinator of the Center for Computer Analysis of Texts at the University of Pennsylvania, talked of an national electronic preprint database, not necessarily full-text. Sam Rankin of the AMS also noted that the AMS is considering a preprints database. The AMS leaves copyright with authors and asks for nonexclusive agreements only.

11. Publications will become more fuzzy. There will be little difference between a preprint and a journal article, little difference between computer-assisted instruction and a multimedia publication, and little difference between access to the Internet and access to a hard disk.

In addition to Rebecca Lasher's comments, a summary of the keynote speaker's address on December 5 is reproduced here from a report prepared by ARL with the assistance of several people who participated in the Symposium:

Yuri Rubinsky of Toronto's SoftQuad, a leading developer of SGML-based (and thus network-friendly) editing software, presented the keynote address. Rubinsky took a

deliberately visionary line, sketching the nature of the electronic text "the day after tomorrow." He listed seven characteristics of that future text:

1. Simulcast publishing. One source file producing a variety of (perhaps complementary) artifacts in different media.
2. Content beyond text. Databases, images, sound, and more will begin to invade the traditional sequence of written words.
3. Fast reading. More informational tools for browsing/skimming will be developed, giving "fast forward" capabilities.
4. The Internet will be a vehicle for appropriate contents, but publishers will be selective about what they distribute on a medium so open and difficult to control.
5. Custom publishing. Databases will be designed so that they can be customized as needed to consolidate and retrieve specific formation. Each reader will "build a unique assemblage out of standard parts."
6. Demographic delivery. Publications will be aimed at individuals by extrapolating their past use and interests.
7. Virtual library. Libraries will not be limited by the constraints of physical buildings.

The Symposium organizer was Ann Okerson of the ARL's Office of Scientific and Academic Publishing. Currently, papers are being contributed by most of the Symposium speakers and the ARL hopes to distribute a collection of papers during the first quarter of 1993, priced for cost recovery.

Thanks go to Rebecca Lasher for sharing her notes, to Ann Okerson for encouraging that the ARL report be shared, and to those participants who contributed to the report and, therefore, this column.

MEMBERSHIP NEWS

New Members

Carter, Nancy F.
University of Colorado
Lester Library Of Math & Physics
Campus Box 184
Boulder, CO 80309
phone #: (303) 492-3928
FAX: (303) 492-1881

Chatfield, Carol F.
86 Roosevelt Circle
Palo Alto, CA 94306

Fairgrove, Rowan
751 E. St. James
San Jose, CA 95112
phone #: (408) 294-2843

Hager, Mary Ann
Lunar & Planetary Institute
CIRS
3600 Bay Area Blvd.
Houston, TX 77058
phone #: (713) 486-2136
FAX: (713) 486-2186

Jones, Michelle L.
SIAM
Marketing
3600 University City Science Center
Philadelphia, PA 19104
phone #: (215) 382-9800
FAX: (215) 386-7999

Naylor, Maiken
24 Fenwick Road
Tonawanda, NY 14150

Pergamon Press, Inc.
660 White Plains Road
Tarrytown, NY 10591-5153
phone #: (914) 524-9200
FAX: (914) 333-1444

Valauskas, Edward J.
Superconducting Super Collider Lab
2550 Beckleymeade Avenue

Dallas, TX 75237
phone #: (214) 708-6236
FAX: (214) 708-0016

Zelinka, Mark
11 Red Yellow
Middeltown, CT 06457

Address/Name Updates

Anderson, Nancy D.
FAX: (217) 244-6649

Delzell, Barbara K.
New Mexico State University
Branson Library
Box 3006 Dept. 3475
Las Cruces, NM 80003-0006
phone #: (505) 646-7481
FAX: (505) 646-7477

Eagan, Ann M.
543 St. Lawrence Avenue
Reno, NV 89509

Kreider, Janice A.
change zip code: V6T 1Z1

Moon, Ralph
Astr-Math-Stat Library
University of California
Berkeley, CA 94720
phone #: (510) 642-5729
internet: rmoon@library.berkeley.edu

Moseley Parsons, Julia C.
861 Kingsbury Road
Lexington, KY 40509

Moser, Maxine M.
Institute For Defense Analyses
IDA-CCR - La Jolla
4320 Westerra Court
San Diego CA 92121
phone #: (619) 455-9400
FAX: (619) 455-1327

Moulik, Amal
change zip code: 94551-0610

Pappas, Daniel T.
change zip code: 94035-1000

Triplehorn, Julia H.
add phone #: (907) 455-6723

Wagner, Stephen C.
6329 Walnut Street, #12
Pittsburgh, PA 15206

Dropped Members

Andelson, Eric L.

Banholzer, Gordon S. Jr.

Bauer, Francie L.

Bedford, Denise D.

Burgard, Daniel E.

Hanus, Karen L.

Hamer, Rebecca

Kamarei, Zahra B.

Kjaer, Kathryn J.

Kreunen, Julie A.

Meyer, Brian L.

Testi, Andrea R.

Wladas, Edward

Total P-A-M membership as of
December 29, 1992 is 165.

Betty Holmstrom
Membership

We're in the News!

In the book *Starlist 2000* by Richard Dibon-Smith (Wiley, 1992), Marlene Cummins and Rosemary Diamond from the University of Toronto are thanked by the author!

Several PAM members (Martha Tucker, Sarah Stevens-Rayburn, Ellen Bouton, Marlene Cummins) are quoted in the article "Using the Internet for Reference" in the January issue of *Online*. They had all responded to a survey. PAMnet is also mentioned.

Continuing Education

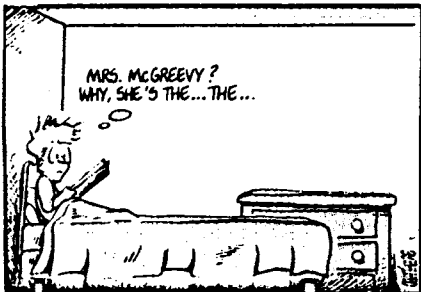
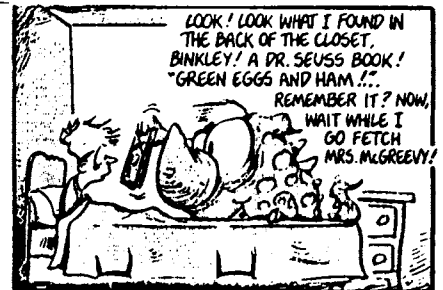
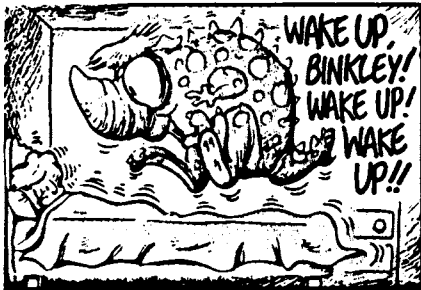
SLA's Cataloging Committee will sponsor a CE course on the Sunday beginning the June 1993 Annual Meeting in Cincinnati. The program title is "Intermediate Cataloging: Bibliographic Description and Subject Access to Books and Non-print Materials." The session is meant to be a refresher course for special librarians who are already familiar with AACR2, MARC formats, and subject lists (like LCSH). The morning session will cover description and the afternoon session will involve subjects and local thesauri.

Mary Ann Southern
PAM Liaison to Cataloging Committee

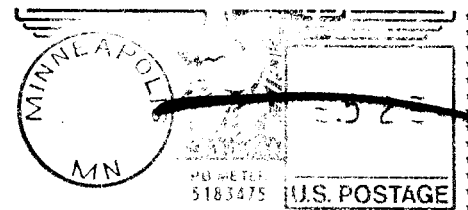
Looking to the Year 2000
Information Professionals Chart the Course



LIBRARY HUMOR



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310 Vincent Hall
University of Minnesota
Minneapolis, MN 55455
USA



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Jack Weigel
Science Library
311 UGL
University of Michigan
Ann Arbor, MI 48109