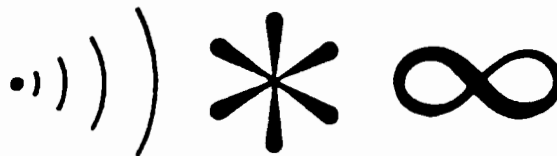


p·a·m

physics astronomy math



PAM BULLETIN

Vol. 18, No. 4

PAM Bulletin

May 1991

MESSAGE FROM THE CHAIR

I would like to remind all those going to San Antonio that it will be very hot outdoors and very cold indoors! Apparently the area around the convention site is lovely, so be prepared to enjoy the outdoor scene!

Also, for those going to San Antonio, there will be an informal (social) meeting of PAM members on Saturday night. All members are welcome to meet in the lobby of the Hyatt Regent Hotel (see map in the conference programme) at 7:30 PM. We will then walk over to THE ORIGINAL for drinks and/or dinner at 8 PM. You may, of course, join us there if you arrive later.

The Original is on the west side of the river where it runs under Losoya, just north of the intersection with Commerce. It is an easy walk from the hotel at river level. Please let Nancy Anderson (ndanders@uiucvmd.bitnet, or (217) 333-2884) know by the end of May if you plan to attend so that she can make the reservations for everyone. The food there is original Tex-Mex [not TeX-Mex?!—Ed.].

The official Division Hospitality Suite is Sunday through Tuesday starting at 8 PM this year. The suite is in the RiverWALK Hotel. On Tuesday, the open house will be a LUAU, organized by our Hawaiian member, Liz Bryson. On that evening, please dress in a Hawaiian shirt, muumuu or as a tacky tourist!

Please do come to the annual business meeting on Tuesday, June 11, at

3 PM. It is a forum for all members to discuss matters of a cross-discipline nature. I especially encourage new members and students to come and meet your fellow PAMers.

Included with this issue of the *Bulletin* you will find a copy of our bylaws. Proposed changes are noted in square brackets. Please read the bylaws carefully and be prepared to vote on them at the business meeting. Also included in this issue is the Annual Report of the Chair (i.e. me).

Being chair has been a very satisfying and enjoyable experience. I would like to thank everyone who helped me.

Marlene Cummins

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PAM BULLETIN

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ANNUAL REPORT, 1990/91

Because reports of the conference activities and regular committee reports (e.g. nominating) can be found elsewhere, I will not include details on those here, but I will tell you about what I see as special accomplishments this year.

1) Reviewed and revised the division bylaws (the Bylaws Committee consisted of Marlene Cummins as chair along with Mary Ann Southern and Jack Weigel). The proposed new bylaws are in the May issue of the *PAM Bulletin*, and will be presented to the membership for ratification at the June 1991 annual business meeting.

2) Compiled a procedures manual to outline the duties of the division officers, committees, *Bulletin* policies etc. Marlene Cummins compiled the manual with the assistance of many members of the division. This manual should make the fulfillment of our duties just a little easier.

3) Opened a money market account

with SLA Headquarters. We are now earning interest on our reserve funds.

4) Consolidated questions and suggestions regarding our awards to finalize an official "Awards Guidelines" which was then approved by current and past awards committee chairs and the executive board.

5) Membership grew from 158 to 171, an increase of 8%!

6) Our current operating fund balance improved by \$683.03 to close at \$1767.39 as of December 31, 1991.

Marlene Cummins
 Chair

MEMBERSHIP REPORT, 1990/91

Here we are in April of 1991 with 171 members. Last April we had 158 members. Apparently your vigorous Membership Committee members are hard at work out there in the grass roots rooting for our group and harvesting new members right and left. Our collective thanks for good work! Donna Cromer, Peggy Dominy, Pamela Enrici, Betty Holmstrom, Carol Hutchins, Heidi Mercado, Martha Murdoch, Jayashri Nagaraja and Marilyn Steinberg have carried forward the project of identifying the institutions with sizeable collections in our subject areas (i.e., which give degrees in these fields), and who have librarians not yet belonging to SLA/PAM.

The information for the new directory has been sent in with the addition of the new bylaws. This new directory will also have information on the activities of our lively members. Since nothing is either completely perfect or perfectly complete, I expect to hear about omissions. Great! I will collect all such information and see to it that it is dutifully included in the subsequent directory. Is there any other type of information you would like to see in the directory? If I hear, I will do. Please let me know: via mail, e-mail, phone, postcard or pigeon.

Anyone who wants a preliminary

version of the 1991 list of members may get it via e-mail from me. Request from lib@deimos.caltech.edu, lib@citdeimo, DEIMOS::LIB, or 6021::LIB. The printed version of the new *PAM Directory* will be given out in San Antonio, and posted after the conference to anyone who doesn't attend.

On the home front, SLA HQ sent a list of "second notice" folks—apparently those to whom a second notice was sent requesting attention to dues. I promptly phoned the phonable and wrote the rest. Of the twenty-three on the list, I received responses from twenty-one.

Of the respondents at least fifteen had sent in their checks (i.e., "the check is in the mail"). Of the remaining six, one was on vacation, one was in Mexico until May (on professional business), one has gone off to law school, one has changed duties, and two have retired. The two who did not respond are presumed to have dropped membership.

Comments were heard from several phone responses regarding SLA dues. Some complained that they were very high, and about to go higher. Others complained also that the timing of SLA dues request is extremely non-optimal: right at the year-end during gift-giving, vacation, and family-celebration time. Wonder if Headquarters might be interested in

- (1) giving members more for their money;
- (2) scheduling dues requests for a non-holiday season; or
- (3) making an installment-payment arrangement possible.

One of our dropped members hailed from Switzerland. It is hard to imagine the value of \$75.00 in US\$ sent to an organization whose meetings/conferences would be prohibitively expensive to attend. Shouldn't SLA waive the \$75 dues for foreign members, or at least for non-northern-hemisphere members? Opinions?

Now that is hardly the stuff Marlene had in mind for a year-end report, but there! I got it off my chest anyway.

Helen Z. Knudsen
Membership Chair

MATHEMATICS NEWS

Mathematics Roundtable

The Mathematics Roundtable in San Antonio is scheduled from 10:30 AM to 12 Noon on Tuesday, June 11. Nancy Anderson has suggested that we all bring copies of our lists of cancellations to hand out at the Roundtable. She points out that this would help in knowing who still has what since we are not always sure whether RLIN or OCLC information is up-to-date.

The list of discussion topics is as follows:

- 1) Journal prices and cancellations in the era of access vs. collection. We could spend the whole meeting on this but I would like to cover some other topics as well. Rebecca Lasher has made some good suggestions. She suggests that we need to either get RLIN or OCLC to create programs that allow us to EASILY tell which libraries still own a title OR we need to build our own database. She also points out that we need to study U.S. restraint of trade laws so we will know how far we can legally cooperate on journal ownership and cancellations.

- 2) An update from the American Mathematical Society Ad Hoc Library Committee. Nancy Anderson indicates that there has not been too much progress on this beyond what was written up in the January *PAM Bulletin*, but she is willing to bring us up-to-date.

- 3) Math bibliographic instruction. How do people do it, what problems or resistance do they encounter, how do they try to make it different and interesting, what do they cover?

- 4) Mathematical statistics. Is a ranking or core list of mathematical statistics journals needed?

- 5) MATH/SCI CD-ROM. Has anyone set up a local area network for this? Is anyone besides the University of Michigan planning on getting the tapes?

- 6) Collection development. What methods are used for faculty involvement in decision making?

7) Journal exchange agreements. What sort of budgetary arrangements exist? Are special funds, if any, provided by the library system, the mathematics department, or other sources?

8) Other burning issues.

This will give you something to think about before San Antonio. What other issues might you prefer to see discussed? I put something out on PAMnet in March, but those of you not on PAMnet may have topics you would like to suggest. You can contact me at: Dorothy Manderscheid, Mathematics Library, 101-D Wells Hall, Michigan State University, East Lansing, Mi. 48824. (517) 353-9573. BITNET: 20676mth@MSU. INTERNET: 20676mth@ibm.cl.msu.edu.

Elsewhere in this issue of *PAM Bulletin* is a report on LC cataloging and classification practices for mathematics materials. Address any questions regarding that to Dorothy McGarry.

Dorothy Manderscheid

PHYSICS NEWS

APS Task Force Report on Electronic Info Systems

See the *Bulletin of the American Physical Society*, vol. 36, No. 4 (April 1991), p.1119-1151. This task force was formed in Nov. 1988 by APS President, Val Fitch. The initial focus, providing physicists convenient access to APS literature, has evolved to a more global one—establishing a National Physics Database. The report describes the physicist's present electronic information environment, information currently available online in physics, and on-going experiments in the use of CD-ROMs. Also reviewed is the network infrastructure developing within the U.S. to link the scientific community. Lastly, the APS plan to provide its own information system is presented.

PHYS Flat-fee Program

AIP has resurrected the flat-fee program for searching STN's Physics Briefs

database. The price is now \$3525.00 per 12-month period. Contact Ellen Reavis at AIP, (212) 661-9260.

Paula Garrett
Julie Kreunen

ASTRONOMY NEWS

Union List of Astronomy Serials

Judy Bausch had announced that June 1, 1991 is the deadline for entries and holdings statements for the 2nd edition of the *UNION LIST OF ASTRONOMY SERIALS*. Please send your entries to Judy Bausch, Yerkes Observatory Library, P.O. Box 258, Williams Bay WI, 53191-0258 (414)245-5555, FAX: (414)245-9805, or jab@tycho.yerkes.uchicago.edu.

Russian Journals Delay

Russian scientific journals seem to be causing great confusion. My sales representative from Faxon (our journal jobber) visited in early March. She reported that as of that date, NO Russian scientific or technical journals for 1991 had been shipped from the Soviet Union, although journals in other fields have been shipped. Apparently the problem is with postage: the Soviet Union previously subsidized the postage costs and is no longer doing that, so publishers are having to find the money for postage costs—not an easy task in the current Soviet economy. There may be an increase in subscription rates to cover the postage costs, but nothing is certain at this point. In any case, scientific/technical journals are currently behind, and the translations of the journals will also probably run behind since none of the translation editorial offices have journal copies either.

Angus MacDonald, Royal Observatory Edinburgh, reports that they have received some of the 1991 issues of some of their Soviet journals, specifically, *Kinematika i fizika* (7(1), 1991), *Novoe v zhizni, nauke, tekhnike. Ser. Kosmonavtika, astronomiya* (1991/1), *Pis'ma v Astronomicheskii zhurnal* (17(1),(2) 1991), and *Ref.*

zhurnal 51, Astronomiya 1991(1)). He wonders whether these have simply slipped through the system and they will not receive any more until the Soviets have sorted things out. ROE has not received any issues of their other Soviet subscriptions.

University of Maryland Serials Section reports that they have received refund checks from Kamkin for two Soviet titles with a memo saying "your subscription has been cancelled by the publisher for 1991. The title will not be published." Updated info from Faxon (23 April) is that when Kamkin representatives visited the Soviet Union in March, they paid to have all issues for their subscription accounts sent air mail for one month. [No one seemed to know what would happen after that!] If you have subscriptions through Kamkin, Terry, at (301) 881-5973, may be able to give you updates or information on what you should receive.

Floppy Almanac

Brenda Corbin says there has been no general distribution of the *Floppy Almanac* for 1991. It is available from: NATIONAL AUDIOVISUAL CENTER, 8700 Edgeworth Drive, Capitol Heights, MD 20743, Phone: 800-638-1300, or within Maryland (301) 763-1896, Fax: (301) 763-6025. The cost is \$25, payable by check or credit card. A printed user's manual is included. The *Floppy Almanac* runs under MS-DOS on microcomputers compatible with the IBM PC, XT, or AT with at least 256k of memory.

Archiving Astro Data

Kathleen Robertson at Institute for Astronomy, U Hawaii at Manoa, would like to bring herself up to date on the archiving of astronomical observational data and wonders if any other astronomy librarians are involved in archiving. Please contact her with any information about the librarian's role in this important activity. Her address is: Kathleen Robertson, Library, Institute for Astronomy, 2680 Woodlawn Drive, Honolulu, HI 96822, roberts@uhifa.ifa.hawaii.edu.

Joyce Watson, Smithsonian Astrophysical Observatory, asks that her response to Kathleen Robertson's request for information on archiving be distributed to everyone:

The subject of archiving astronomical data is far too large, and much too complicated to attempt to explain in an e-mail message. It is also in a constant state of flux.... Kluwer is publishing a book in May 1991 that should give a good background to this subject, *Databases and On-Line Data in Astronomy*, edited by Daniel Egret. I believe the price is \$45. This contains chapters on archiving facilities for IUE, IRAS, EXOSAT, HIPPARCHOS-INCA, and many others, and should provide a sound background, as all chapters are contributed by the scientists, etc., involved. (Please note, everyone—although I wrote a chapter, I don't get any royalties. Nor do I take responsibility for the finished product!)

Defective Symposia Issues

Are people still having problems with defective issues of the paperback copies of the Symposia series? KPNO replaced #143 TWICE, and now has #148 with pages falling out. If defective paper copies continue to be a problem, write to either Gert Kiers, Kluwer Academic Publishers, Spuiboulevard 50, PO Box 17, 3300 AA Dordrecht, Netherlands, or to Stephen Dane, Kluwer Academic Publishers, 101 Philip Drive, Norwell, MA 02061. Whichever you write to, send a copy of your letter to the other one. Has Kluwer changed to a different, cheaper binder? We are pleased that Kluwer is so good about replacing defective volumes, but it should NOT be a consistent problem.

Astronomy Journals Miscellany

A. Ratnakar, Librarian, Raman Research Inst., Bangalore, India announces that recently a special issue of the journal *Current Science* has been brought out on astronomy, and includes 60 color astronomical photographs taken by David Malin. Anyone interested in this publication, which is priced at US \$15, should

contact the Indian Academy of Sciences, P.B.No.8005, Sadashivanagar, Bangalore 560 080, India.

Mrs. P.A. Malegaonkar, Inter-University Center for Astronomy and Astrophysics, reports that the IUCAA library is interested in acquiring back volumes of important astronomy and astrophysics journals. Please send lists of duplicate serials and monographs to: IUCAA Library, Post Bag No. 4, Ganeshkhind, Pune 411 007, India.

The library at the Centro Astronomico de Yebes requests duplicate journals. Please contact Librarian (BV), Centro Astronomico de Yebes, Apartado 148, E-19080 Guadalajara, Spain for a specific list of items needed. You may also request the list by e-mail (internet) from: bujarra-bal@cay.es. If required, they will pay expenses of surface shipping.

The Physics Library at the University of Sydney is missing volumes of the *Astrophysical Journal Supplement Series* in the 1970s and early 1980s. If anyone may be able to assist in filling these gaps, please contact Ms Vicki Moore, Librarian, Physics Library, University of Sydney, Sydney NSW 2006, Australia.

Jenny Davies at CSIRO Radiophysics is anxious to hear from anyone who can assist in filling gaps in the astronomical journal holdings at the Australia Telescope Narrabri site. Please contact Ms. Jenny Davies, Librarian, CSIRO Radiophysics Laboratory Library, PO Box 76, Epping NSW 2121, Australia. Jenny may also be contacted via e-mail at library@rpepping.oz.au.

Astronomy Directories

Andre Heck, CDS, responded to Sarah Stavens-Rayburn's request for clarification on the *Astronomy, Space Sciences and Related Organizations of the World (ASpScROW)* with the following comments: Yes indeed, *ASpScROW 1991* is supposed to supersede (by merging and broadening the scopes of) *IDAAS* and *IDPAI*. The 1990 editions of the latter ones are still available (and not too outdated) for those who would not like to spend as much as the price of the

two-volume new directory. It is a bit early to say which will be the periodicity of *ASpScROW*. I am already getting the input from the current updating campaign, so a new version could be ready by the end of this year. BUT I suspect that the policy will be to review within a few months how many copies of the present edition are left. Considering the enormous amount of work such a compilation represents, I must confess I am not against a two-year interval between editions. However, the customers will have the last word.

NASA Online Workshop

And lastly, Sarah Stevens-Rayburn gives us what she dubs "A Premature Report on the NASA Workshop on Online Astronomy Literature":

Ellen Bouton, Joyce Watson, and I, along with a couple of dozen astronomers, bureaucrats, computer types, and hybrids of these last three, spent March 20-21 theorizing about the possibilities, potential, and problems with exploiting computer technology in the creation and dissemination of astronomical information. We will be prepared to try to answer questions and share what we know at the SLA Astronomy Workshop, but thought that you'd like to know now what the hope/plan is, assuming that MAJOR hurdles can be surmounted.

In summary, the plan is to run a two year pilot project that will provide on-line access to as many of the abstracts as can be made available of the AAS journals, plus access to the current two years of the full-text of these journals. The pilot would run as part of the ADS (the Astrophysics Data System—soon to be available at selected sites) and internet access will be available. This would be a cooperative project among the AAS, NASA, and the NSF, and obviously the governing boards of these organizations all need to give their approval before any real steps can be taken.

From a librarian's point of view, I can tell you that impacts on libraries, librarians, and continued archival access to as-

tronomical material was a very encouraging consideration and component of the deliberations, as was the necessity to make any system established universally available. If I (or Ellen or Joyce) can answer specific questions you might have at this point, please contact us. And we will certainly strive to keep you informed as the fuzzy edges of this proposal become sharper.

Ellen Bouton

Van Atta, Cathy
2925 E. Mabel
Tucson, AZ 85716.
library@noao.edu

Watson, Joyce
(from Rey-Watson, Joyce)
FAX: (617) 495-7199
joycemr@cfa

TOTAL PAM MEMBERSHIP AS OF
APRIL 15, 1991 IS 171.

Helen Knudsen

MEMBERSHIP NEWS

New Members:

Kreitz, Patricia A.
Superconducting Supercollider Lab.
Library MAIL STOP 2010
2550 Beckleymeade Avenue
Dallas, Texas 74237
(214) 708-6071

White, Molly T.
1200 South Fifth St.
Austin, TX 78704
(512)471-7539

Dropped Members:

Johnson, Walt A.

Address/Name Updates:

Buchan, Ronald L.
FAX: (301)621-0134

Croneis, Karen
(314)889-5467
FAX: (314)746-4045

Egan, Ann
1850 Idlewild Drive #K-1
Reno, Nevada 89509

Goode, Joanne
FAX: (606)232-5728

Hackenberg, Jill
University of Houston Libraries
libj@jetson.uh.edu

Kegel, Deborah A.
FAX: (619)534-5583

MATHEMATICS CLASSIFICATION AND SUBJECT CATALOGING AT THE LIBRARY OF CONGRESS

During the course of its discussions on mathematics libraries, the American Mathematical Society Library Committee thought it would be useful to obtain information on subject access as provided by the Library of Congress. Research libraries use the cataloging provided by LC for their catalogs, and follow LC's practices in their own cataloging.

In response to requests to the LC Subject Cataloging Division and the Decimal Classification Division for information on cataloging mathematics materials, the people who catalog those materials provided information on LC practices for applying Library of Congress Subject Headings, Library of Congress Classification, and Dewey Decimal Classification. The information from LC provides an opportunity for a better understanding by librarians and mathematicians of how LC works, and that understanding can help in use of the individual library's catalogs and collections.

The paper below on LCSH and LCC is an informal summary of current procedures drawn from the Subject Cataloging Manual; it in no way represents a cataloging code.

It is interesting and important to note that the Library of Congress Subject Cataloging Division was very responsive to

our expressed concerns. The treatment of collected works of individual mathematicians as described in the paper surfaced as an issue of particular concern to mathematicians and librarians. As a result of discussions held at the Mathematics Workshop of the Physics-Astronomy-Mathematics Division of the Special Libraries Association at its annual conference in June 1990, input from some mathematicians, and subsequent correspondence by a member of the Library Committee with the Library of Congress Subject Cataloging Division, LC decided to classify the collected works of individual mathematicians in QA3 rather than disperse this type of publication as had been done previously. The first subject heading will be "Mathematics" and any easily identifiable fields of specialization will be added as secondary subject headings.

If anyone has any specific concerns with, or questions about, cataloging and classifying mathematics materials, please contact Dorothy McGarry at (213) 825-34388, ecz5ctt@uclamvs, or ecz5ctt@mvs.oac.ucla.edu. The AMS Library Committee can serve as a continuing line of communication for input to LC and from them to the library and mathematics communities.

We recommend that librarians share this information with their library committees, departmental liaisons, or mathematicians they know are interested.

The Library Committee wishes to express its appreciation to the Library of Congress and to the mathematics catalogers and classifiers, and to the Subject Cataloging Division and the Decimal Classification Division for their excellent responses.

Dorothy McGarry
Nancy Anderson

Cataloging Mathematics Materials at the Library of Congress

The Physical Sciences Section of the Subject Cataloging Division is responsible for the cataloging and classification of

mathematics materials at the Library of Congress. The majority of items handled in the section consists of monographs (either as cataloging-in-publication (CIP) items or published texts) or serials and audio-visual materials. In addition to assigning subject headings and class numbers, the subject cataloger is also required to determine the appropriate MARC coding for the assigned headings and for the related bibliographic features of the item being cataloged (bibliography, geographic area codes, congress, etc.) and is responsible for the development or revision of appropriate subject headings, cross-references, and class numbers.

Let's consider the cataloging process in two phases: the assignment of the subject heading(s), and the assignment of the class number(s).

Assignment of Subject Headings

When the cataloger receives a work, it is given a "technical reading" to determine the main subject of the work, the secondary subjects, and other pertinent features that will be brought out in the assigned headings. The cataloger scans the work relating the title to the actual contents, looks at the prefatory matter to determine the author's purpose and intended audience, and notes other features of the work that need to be brought out in the cataloging (predominance of illustrative matter, type of illustrations, format of publication, etc.).

When assigning subject headings it is important to remember that subject cataloging is not indexing. The purpose is to give a prospective reader a summary of the general subject content of the work, bringing out the most important topics discussed, not to give a detailed account of the contents.

The number of headings required varies with the work being cataloged. If one topic predominates, the cataloger assigns a heading appropriate to this topic as the primary subject heading. Secondary headings are assigned, following the primary heading, to cover additional

important topics of the work. Headings are assigned only for topics that comprise at least 20% of the work. Additional headings are given to complete standard arrays required by cataloging rules. Catalogers are instructed not to assign more than ten headings to a work. This is usually not a concern with math materials.

Some examples:

Title: Intermediate algebra

Assigned headings:

1. Algebra.

Title: College algebra and trigonometry

Assigned headings:

1. Algebra.
2. Trigonometry.

Title: Sir Isaac Newton and the development of calculus

Assigned headings:

1. Newton, Isaac, Sir, 1642-1727.
2. Mathematicians-England-Biography.
3. Calculus-History.

NOTE: This particular title was primarily a biography of Newton and contained several chapters relating to the history of calculus from Newton to the present day. Additionally, the second heading is one required by cataloging rules for biographies.

Once the subject content of the item has been determined, the cataloger selects the appropriate terminology from the *Library of Congress Subject Headings* (LCSH) and/or the LC Name Authority File to assign to the work. The cataloger is instructed to select the heading(s) which are as specific as the topics they cover. For example, a book on differential equations will receive the heading 'Differential equations' not 'Equations'. However, some works will discuss several topics that can be subsumed under a broader or more general heading. This is particularly true of conference, festschrift, and selected/collected works type publications. In this instance, if the number of more specific topics discussed in the work exceeds three, the cataloger will assign the broader subject heading to the work.

Titles of most mathematical works are fairly straightforward and LC receives many textbooks and their editions that present little problem with choice of subject heading. On the other hand, LC also receives many works that are on the forefront of mathematical research. These items have titles that, while not exactly misleading, tend to obscure the actual subject content, and a deeper analysis of the text is required sometimes in consultation with the volumes in the Catalogers' Reference Collection.

Some examples:

Title: Lectures on the edge-of-the-wedge theorem

Assigned headings:

1. Analytic set continuation.
2. Analytic functions.

Title: On the general Rogers-Ramanujan theorem

Assigned headings:

1. Number theory.
2. Partitions (Mathematics).
3. Functions, Hypergeometric.

Title added entry:

Rogers-Ramanujan theorem

Title: Resolving maps and the dimension group for shifts of finite type

Assigned headings:

1. Topological dynamics.
2. Entropy (Information theory).
3. Mappings (Mathematics).

On the verso of the title page, many items now include primary and secondary classification numbers from the American Mathematical Society's Mathematics subject classification. Having these numbers is of tremendous value in helping the subject cataloger determine the content of the work especially in the more difficult research works such as those in the *Lecture notes in mathematics series*. Consequently, these books are processed quickly, the subject content assessed more accurately, and the cataloging data is available on a more timely basis to libraries and their users. Recommending that authors

and publishers include the AMS classification in their publications would be a very valuable service to the library community!

Until recently, subject headings at LC were developed in response to the need created by the books in the Library's collections. If a heading appeared in LCSH, it was used on at least one bibliographic record or had been established for reference purposes in LCSH. Now, through several cooperative programs, LC receives new and revised subject headings from outside libraries and includes these in its database. Communication on matters of subject heading or classification policy should be directed to: Mary Kay D. Pietris, Chief, Office for Subject Cataloging Policy, Library of Congress, Washington, D.C. 20540.

When the LC cataloger comes up against a discrete, identifiable subject concept in an item for which a specific heading is lacking in LCSH, he has several options. If the work in hand and reference sources can provide sufficient information, the *Subject cataloging manual* (SCM) instructs the cataloger to establish a new subject heading for the work. Lacking sufficient information for establishing the concept as a new heading (as is sometimes the case with CIP items) the cataloger can give a partial title added entry when the concept is expressed in natural language in the title of the item. The concept is then retrievable in addition to the access provided by subject headings. Should further information become available later on to help the cataloger establish the concept as a new heading, the heading is made and the bibliographic record is revised.

When establishing a new heading, the cataloger considers information provided in the work in hand as well as the available reference sources. The heading is established according to instructions in the SCM and the heading, its cross-references, and data relating to its creation is recorded in a subject authority record (SAR). The SAR is reviewed for accuracy and for compliance with cur-

rent policy in the cataloging section and then sent, along with the work for which it was made, to the Subject Headings Editorial Section for entry into the authorities database. The heading appears on the weekly list of proposed headings of the Office for Subject Cataloging Policy (OSCP). The authority record is given final approval at the weekly editorial meeting, after which it becomes a permanent record in the authorities database (and is printed in LCSH) and is available for use in subsequent cataloging.

Should an already established heading need to be revised or have additional references added to it, the SAR for the heading follows a similar path as described above. The entire process for establishing a new heading or making revisions to an already established heading takes approximately four weeks from submission to approval. This time period allows for review, input into the database, consultation between cataloger and OSCP, comment from other catalogers, approval, and final editing and verification of the authority record.

Just a note about the variety of forms of subject headings that appear in the LCSH. The LCSH is constantly being added to and revised. The headings that appear reflect cataloging policy in effect at the time the headings were created. Thus you will see phrase headings in natural language (e.g. Number theory, Topological dynamics, Mathematical recreations) as well as headings in inverted order (e.g. Equations, Theory of; Sheaves, Theory of). Some headings in mathematics have been recently converted to natural language form, for instance Number theory from Numbers, Theory of, and in these instances, the corresponding bibliographic records are also changed to reflect the new heading.

Assignment of Classification

The purpose of LC classification is to arrange the Library's books and other materials on the shelf according to subject. The LC classification schedules are ar-

ranged from the most general works to more specific topics within the discipline as a whole, and from the general to the specific within various topics contained in the subject.

Both the LC class number and the primary subject heading assigned represent the major subject of an item. Assignment of a specific class number is therefore dependent on the cataloger's judgment as to what is the subject of a particular book. Usually the book classes in the most specific number available.

Some examples:

Title: Journal of Indian mathematics
(a periodical of general mathematics)
Class no.: QA1
Heading:
Mathematics-Periodicals.

Title: Journal of the history of mathematics
(a periodical of general mathematical history)
Class no.: QA21
Heading:
Mathematics-History-Periodicals.

Title: History of Indian mathematics
quarterly (a periodical of history
of mathematics in India)
Class no.: QA27.I5
Heading:
Mathematics, Hindu-History-Periodicals.

Title: Review of Indian contributions to
number theory
Class no.: QA241
Heading:
Number theory-India-Periodicals.

This general pattern for periodicals is also followed for other forms (congresses, collected/selected works, festschrifts, etc.). In answer to your specific question about QA3 for the collected works of a particular author, the subject content of the work in hand determines the class number. For example, if the content covers many fields of mathematics, the work will class in QA3 since this is the most general number available for collected works encompassing all areas of

mathematics. If the works in the volume were limited to three or fewer topics, the volume will class with the topic that predominates and that is represented by the primary subject heading assigned to the work.

Biographical works class in the biography numbers near the top of the schedules since there are no numbers for biography of number theorists, algebraists, etc.

A note about the LC classification schedules. They, like the LCSH have been developed over many years and are constantly being added to and revised. A major revision of the QA schedule took place in 1973 and was issued as the 6th edition. Major portions of the schedule were assigned new numbers and some portions were reassigned numbers that had been in use for other topics in mathematics. Therefore, some books classed before 1973 may not reflect the older subject assignments. Contrary to the practice of updating older bibliographic records to reflect new or revised subject headings, the Library DOES NOT go back to reclass these materials when a new or revised class number is added to the schedules.

Additions and revisions to the classification schedules follow a path similar to that of the new or revised subject headings. Proposals from the cataloger are reviewed in the section, are sent to the Classification Editorial Section, and continue on to the OSCP for further review and inclusion on the weekly list of classification proposals. The editorial meeting gives final approval before returning the proposal to the editorial section for final input. In revising the QA class, LC follows as much as possible the AMS classification for mathematics and other reference works when interpolating new class numbers into the existing schedule.

If you have further specific questions or want clarification of some of the practices mentioned above, do not hesitate to write or call. We will be happy to reply.

Jim Starner

Decimal Classification Division

Julianne Beall has asked me to reply to your letter concerning the AMS Library Committee, since John Comaromi (the Editor) and I (Winton Matthews) worked on the 510 Mathematics schedule for Edition 20.

The last major change to 510 was for Edition 18, when it was completely revised by Edna Van Syoc, who had a background in mathematics. Before publication, the new schedule was reviewed by the Editorial Policy Committee (EPC), other librarians, and interested mathematicians. There was some negative criticism. Unsatisfactory elements of the schedule that the reviewers agreed upon were altered. Edna made little or no change to those areas where disagreement could not be resolved or where the critics made no comment. Since then, Edna has retired. Thus, the previous remarks are based on my memory of what she told me.

Since the publication of Edition 18, the Decimal Classification Division has received letters concerning the current schedule. One letter suggested that we scrap the current schedule and use 510 plus the AMS scheme. Another person thought that if a math concept was mentioned in one branch of math, such as algebra, the concept could not be applied in another branch, such as geometry, where it was not mentioned. Our most vocal criticism came from several Australian mathematicians who felt that we should produce an entirely different development. To my knowledge, the Division has not received a reworking of the schedule from any of our critics.

For Edition 20 John Comaromi and I did some minor reworking of 510. Part of the reworking came from my own experience in classifying books using 510. For the most part I find 510 easy and clear to use, but that is maybe because I have a mathematics background. Schedules with routine revisions are reviewed only by EPC members and by their colleagues. Upon the suggestion of Arnold Wajen-

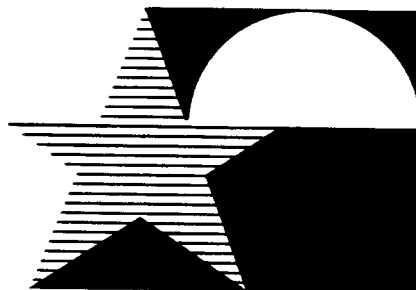
berg, a member of EPC from the University of Illinois at Urbana-Champaign, the 510 revision was also reviewed by Lois M. Pausch, Assistant Mathematics Librarian, and Professor Felix Albrecht. Most of the changes were approved; however, our suggested relocations in 514 topology (which were the only serious changes) were not approved by EPC.

At the fall 1990 meeting, EPC discussed the possible areas for change in Edition 20, especially those schedules that will be either completely revised or extensively revised. 510 is scheduled for only regular revision. Comments from your committee to the Division on what it thinks needs to be done to 510 will be considered when 510 is revised.

For the present, the Division would like to know exactly what we can do for your committee. We felt that your letter was a request for assistance without going into details. One way we might help you is by having one of the editors talk to your committee at an SLA conference. The talk could either be general in nature, e.g., how the Division edits a schedule and how the editorial rules affect the wording of the notes, or directed pointedly to 510.

John Comaromi, who also has a background in mathematics, says that he has concluded that 510 needs to undergo almost a complete revision to meet the needs of a library with a moderate mathematics collection. He also indicated that he holds the current 510 in extremely low esteem.

Winton E. Matthews, Jr.



PAM BYLAWS REVISIONS

Proposed Amendments

As approved by the executive board April 17, 1991, the proposed changes are:

- 1) inclusion of an indication that the division scope note is included;
- 2) all gender biased pronouns changed to non-gender biased ones or removed;
- 3) all instances of the words chairman or chairman-elect changed to chair and chair-elect, respectively;
- 4) many instances of Association and Division changed to Association's and Division's, respectively;
- 5) Article III Sect. 1, "herein" changed to "therein;"
- 6) Article IV Sect. 2, phrase added to clarify which conference;
- 7) Article V Sect. 5, a phrase inserted in order to clarify the purpose of this section; "40%" phrase removed to facilitate conduct of division business;
- 8) Article V Sect. 6, title changed;
- 9) Article VIII Sect. 1, "P-A-M" inserted for clarity;
- 10) Article VIII Sect. 2, word inserted to clarify meaning;
- 11) Article VIII Sect. 4, renumbered Sect. 3;
- 12) Article IX Sect. 2, removal of the word "written" to allow verbal acceptance;
- 13) Article XI Sect. 1, "may" substituted for "shall" to avoid compulsion of the chair;
- 14) Article XII Sect. 1, "for its members" deleted as redundant;
- 15) Article IV Sect. 1, upper case substituted for clarity and consistency;
- 16) Article VI Sect. 2, phrase added for clarity.

Conventions: In order for you to see at once, both the old and new versions, the proposed changes are inserted in square brackets immediately following the word(s) they are intended to replace. Empty square brackets means that the previous word(s) would be omitted.

Words in square brackets with ellipses, e.g. [...word(s)...] are intended as additions, rather than replacements.

BYLAWS

Physics-Astronomy-Mathematics Division Special Libraries Association

Article I: Name and Objectives

Section 1. The name of this organization shall be Physics-Astronomy- Mathematics Division, Special Libraries Association.

Section 2. The objectives of this Division shall be those of the Special Libraries Association: to provide an association of individuals and organizations having a professional, scientific or technical interest in library and information science, especially as these are applied in the recording, retrieval and dissemination of knowledge and information in areas such as the physical, biological, technical and social sciences and the humanities; and to promote and improve the communication, dissemination and use of such information and knowledge for the benefit of libraries or other educational organizations.

Section 3. [Scope Note:] Principal interests of this Division include all aspects of librarianship in the fields of physics, astronomy, and mathematics. Particular emphasis is given to the control, dissemination, and retrieval of knowledge and information in these areas.

Article II: Membership

Section 1. Membership of the Division shall be all those members of Special Libraries Association who elect to affiliate with the Division.

Section 2. Members, Associate Members and Retired Members of the Association who are members of the Division shall have the right to vote and to hold any elective or appointive office in the Division.

Section 3. Student Members of the Association who are members of the Division shall have the right to vote and to

hold any appointive, but not elective, office in the Division.

Section 4. The rights and benefits of Sustaining Members and Honorary Members shall be determined by the Association [Association's] Board of Directors.

Article III: Executive Board

Section 1. There shall be an Executive Board that shall have the power and authority to manage the Division's property and to regulate and govern its affairs. The Board shall determine policies and changes herein [therein] within the limits of the Bylaws of the Association and of the Division, shall take such actions as it considers necessary to carry out the objectives of the Division, and shall perform other functions as the membership may direct.

Section 2. The Board shall consist of five members elected by the membership: the chairman [chair], the chairman-elect [chair-elect], the secretary, the treasurer, and the most recent past chairman [past-chair]. All members of the Executive Board shall be Members, Associate Members, or Retired Members of Special Libraries Association.

Section 3. The Board shall hold at least one meeting annually and may hold additional meetings upon call of the chairman [chair] or upon written request of any member of the Board. Three members of the Board shall constitute a quorum.

Section 4. A vacancy in the membership of the Executive Board, except in the office of the chairman [chair], shall be filled by majority vote of the remaining members of the Board, this Board-elected member to serve until the next annual meeting.

Section 5. The term of office of chairman [chair], chairman-elect [chair-elect], and immediate past chairman [past-chair] shall be one year. The term of office of treasurer and secretary shall be two years. All members of the Executive Board shall serve until their successors are elected and assume their duties. The term of office shall commence at the adjournment

of the Association [Association's] Annual Business Meeting, or, if there is no Annual Business Meeting, on July 1 following the election.

Article IV: Officers

Section 1. The chairman [chair] shall be the chief executive officer of the Division and subject to the Executive Board; shall have general supervision and control over its affairs; shall preside at all business meetings of the Division and of the Executive Board; shall recommend to the Board such measures as he considers [are considered] desirable to further the objectives and broaden the effectiveness of the Division; with the secretary shall sign all contracts and other legal documents; unless determined otherwise by the Executive Board, with the treasurer shall sign all checks drawn upon Division funds; shall be a member ex-officio without vote of all committees except the Nominating Committee; with the chairman-elect [chair-elect] shall represent the Division at meetings of the Association division [Division] Cabinet held during the Association year in which they are chairman [chair] and chairman-elect [chair-elect]; or, if unable to attend a meeting of the Cabinet, the Division chairman [chair] shall designate a member in the Division to serve as representative; shall attend the meetings called by the Chairman [Chair] of the Division Cabinet and he [] shall prepare such reports as may be required by the Division Cabinet Officers.

Section 2. The chairman-elect [chair-elect] shall assist the chairman [chair] in the performance of his [his or her] duties; shall be responsible for the program of the Division at the annual convention [...held in the year during which the chairman-elect will have become chair]; with the chairman [chair] shall represent the Division at meetings of the Division Cabinet held during the Association Year in which the office is held; in the event of the absence or withdrawal of the chairman [chair], [...shall assume...] all the duties and obligations of the chairman-

ship [chair] shall be assumed by the chairman-elect [].

Section 3. The secretary shall keep a record of all meetings of the Division and of the Executive Board; with the chairman [chair] shall sign all contracts and other legal documents; and shall also perform such duties as the chairman [chair] may assign.

Section 4. The treasurer shall have custody of the Division funds; with the chairman [chair] shall sign all checks drawn upon Division funds, unless determined otherwise by the Executive Board; shall furnish such financial statements as may be required by the Executive Board, the chairman [chair], and the Division Cabinet Officers.

Section 5. The immediate past chairman [past-chair] shall be a member of the Executive Board and shall carry out such duties as the chairman [chair] and/or the Board may assign.

Article V: Meetings

Section 1. The Division [Division's] annual business meeting shall be held during the Association [Association's] Annual Conference, or, if there is no Conference, upon call of the chairman [chair]. At least one business meeting shall be held during the term of office of each elected Executive Board.

Section 2. Special meetings may be held upon call of the Executive Board or on petition of 30 members of the Division. Notice of a special meeting shall specify the business to be transacted and no business other than that stated in the notice shall be considered.

Section 3. Notice of meetings in writing or printed in the Division [Division's] official bulletin shall be sent to each member at least 30 days before the meeting.

Section 4. A quorum for the transaction of business shall be 20 [...% of the...] Division members.

Section 5. Whenever in the judgment of the Executive Board a question arises [...that should be put to a vote of the entire membership of the division and ...]

which cannot await the Annual Business Meeting, the Executive Board may submit the question for vote by mail. The closing date for the return of the mail votes shall be established by the Board. The question presented shall be resolved by a majority vote , provided 40 percent of the members have voted [].

Section 6. When not in conflict with these Bylaws, *Robert's Rules of Order [...Newly...] Revised* (latest edition) shall govern all deliberations.

Article VI: Committees

Section 1. Standing and special committees of the Division shall be established by the Executive Board. These committees shall be responsible to the Board, which will delegate such powers and functions to them as the Board finds desirable for the conduct of its business and for carrying out the objectives of the Division.

Section 2. The Chairman [chair] shall appoint the members and designate the chairmen [chairs] of all committees except the Nominating Committee. Appointment to standing committees shall be made [...in such a way as...] to provide continuity of membership. No member may serve continuously on any one committee in excess of 6 consecutive years.

Section 3. Committee chairmen [chairs] may participate in meetings of the Executive Board but shall not have the right to vote.

Section 4. Each committee shall submit to the Executive Board a written report of its activities throughout the year, together with any recommendations considered necessary or advisable. Additional reports may be submitted by a committee or requested by the Board or chairman [chair].

Section 5. Funds for committee expenses shall be authorized by the Executive Board upon request.

Article VII: Sections

Section 1. Sections relating to definite areas of interest within a Division may be established by the Executive Board upon

written petition of 15 members of the Division who desire to participate in the activities of the proposed Section. Sections shall receive needed operating funds from the Division and shall submit to the Division [Division's] Executive Board an annual report including a financial statement. Should dissolution of a Section occur, its assets shall revert to the Division. Formation or dissolution of a Section shall be reported to the Division Cabinet Officers.

**Article VIII: Funds, Contracts,
and Property**

Section 1. Funds for Division expenses shall be derived from the Association as an allotted share of the annual dues paid by Division members. Eligibility for this allotment is based on submission to the Division Cabinet Officers of the Division [P-A-M Division's] financial statement for the previous year and on its acceptance by those Officers. Requests for additional funds or loans may be submitted to the Division Cabinet Officers for presentation to the Association [Association's] Board of Directors for its consideration. All funds received by a Division shall be used for purposes incident to the fulfilment of the Division [Division's] objectives. Should dissolution of the Division become necessary, its assets shall revert to the Association.

Section 2. Any agreement or contract entered into by the Division shall have advance approval of the Executive Board. If liability exceeds the Divisions [Division's] available or budgeted funds, prior notification to the Division Cabinet Officers shall be made for the purpose of obtaining the required advance approval of the Association [Association's] Board of Directors. All affiliate and contractual relationships shall be directed toward the best interest of the Division and the Association [...and...] shall protect the property and identity of the Division and Association.

Section 4 [3]. Purchase of property by the Division shall have the written approval of the Executive Board. If the cost

is over \$500.00, it shall have the advance approval of the Division members. If it exceeds to [the] Division's available or budgeted funds, or exceeds \$1000.00 [,] prior notification shall be made to the Division Cabinet Officers for the purpose of obtaining the required advance approval of the Association [Association's] Board of Directors.

**Article IX: Nominations and
Elections**

Section 1. A Nominating Committee for each election of members to the Executive Board shall be appointed by the Board no later than six months prior to the annual business meeting. The current secretary, treasurer, and past chairman [past-chair] shall each appoint one member to the Nominating Committee. This Committee shall be composed of three members, no one of whom shall be a member of the Board. One member shall be a member of the previous Nominating Committee and he [] shall be the Committee chairman [chair].

Section 2. Each year the Nominating Committee shall present one or two candidates for chairman-elect [chair-elect] and either secretary or treasurer, the latter two offices to be filled in alternate years. The Committee shall obtain the written [] acceptance of each nominee prior to submission of its report.

Section 3. The report of the Nominating Committee shall be published in the official bulletin or otherwise sent to Division members at least four months before the annual business meeting. Further nominations accompanied by written acceptance of the nominee may be entered by petition of not less than 10 Division members and shall be filed with the Nominating Committee at least 60 days before the annual business meeting. The report of the Nominating Committee shall be presented for approval by the membership at the Division [Division's] annual business meeting.

Section 4. If the slate includes more than one candidate for any office, elec-

tion shall be [...by...] ballot [,] mailed to each Division member 30 days before the Division [Division's] annual business meeting. The candidate who receives the largest number of votes for any office shall be elected. In the event of a tie, election shall be by majority vote of the members present at the Division [Division's] annual business meeting.

Article X: Publications

Section 1. Control of all publications of the Division for its members [] shall be vested in the Executive Board.

Section 2. The Division shall not be responsible for the statements or opinions advanced in its publications or at meetings of the Division, or for statements by any of its members except those authorized by the Division [Division's] Executive Board or those reflecting duly established policies of the Division or Association.

Article XI: Division Representation and Affiliation

Section 1. Division representatives to joint committees and meetings of other societies having objectives allied to those of the Association shall [may] be appointed by the Chairman [Chair]. Such representatives shall submit at least one written report to the Executive Board during the year.

Section 2. Upon approval by a majority of the Division members voting, the Division may affiliate or disaffiliate with a common interest organization provided that:

1) The objectives of such organization are consistent with those of the Division and of the Association, and

2) The activities of such organization are not in conflict with Article I, sections 3, 4, and 5 of the Association [Association's] Bylaws;

any other affiliation, including that with a national or international organization, shall be approved by the Association [Association's] Board of Directors. Notices of affiliations and disaffiliations shall be reported to the Division Cabinet Officers

and to the administrator of the Association office.

Article XII: Dissolution and Merger

Section 1. The Division may petition for dissolution, or for merger with another Division, by mail vote of its membership, the ballots to be mailed not more than 45 days after an annual business meeting at which a majority of the members present votes that it [the Division] no longer meets the needs of the membership. If two-thirds of the mail ballots favor dissolution, or merger, the petition shall be submitted to the Division Cabinet Officers for presentation to the Association [Association's] Board of Directors, which shall make the final decision.

Section 2. In the event of dissolution, all assets of the Division shall revert to the Association. In the event of a merger, assets shall become a part of the new merged unit, as decided upon by the two bodies concerned. Any other monies shall revert to the Association.

Article XIII: Amendments

Section 1. These Bylaws may be amended by a two-thirds vote of the members present and voting at any Division meeting provided written notice containing the text of the proposed amendment has been sent to each member at least 30 days before the meeting at which it is to be considered.

Section 2. Amendments may be proposed by the Executive Board, the Bylaws Committee, or 10 members of the Division. Proposals originating in the Executive Board or in the Bylaws Committee shall be approved by a two-thirds vote of the Board before submission to the members. Proposals originating by petition shall be submitted in writing to the Executive board and shall be presented to the members with the recommendations of the Board.

Section 3. Any revision in or amendments to the Division [Division's] Bylaws shall be submitted to the Association [Association's] Bylaws Committee for review

before presentation to the Division membership.

Bylaws adopted 1973.

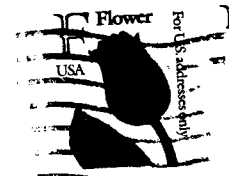
Bylaws amended; approved as amended at annual business meeting, July 11, 1984.

Judith A. Lola, Chair

[...Bylaws amended; approved as amended at PAM Annual Business Meeting, June 11, 1991.

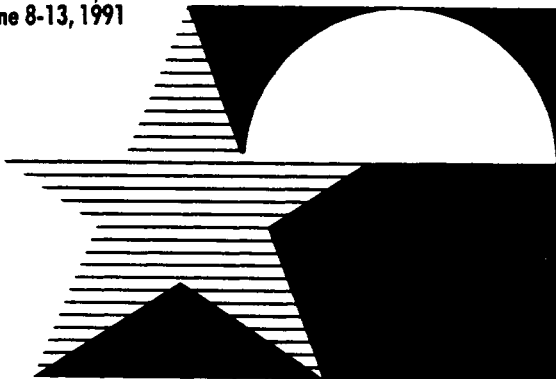
Marlene Cummins, Chair]

Murdoch
Mathematics Research Library, GN-50
University of Washington
Seattle, WA 98195 USA



MASTERMINDING TOMORROW'S INFORMATION ...
Creative Strategies for the '90s

Special Libraries Association
82nd Annual Conference
San Antonio, Texas
June 8-13, 1991



SLA/PAM ARCHIVES (free)
Jack Weigel
Physics-Astronomy Library
290 Physics-Astronomy Bldg.
University of Michigan
Ann Arbor, MI 48109