

Computer Music Association  
Newsletter  
Vol. 2, No. 4 - Vol.3, No. 1  
February 1982

Computer Music Association -- Board of Directors and Officers

Battier, Marc, FRANCE	Haus, Goffredo, ITALY
Beauchamp, James, USA - Pres.	Howe, Hubert, USA
Blum, Thomas, USA - Editor, Co-founder	Laske, Otto, USA
Buxton, William, CANADA	Kendall, Gary, USA - Membership Chairperson
Byrd, Donald, USA	Roads, Curtis, USA - Co-founder
Dashow, James, ITALY - V.Pres.	Snell, John, USA
Gross, Dorothy, USA - Sec'y	Strawn, John, USA - Tres., Co-founder

**Editor's Notes**

This is a double issue due to the rather extreme amount of elapsed time since the last issue and the density of information included. We wish to apologize for the tardiness of delivery and will work to meet our "quarterly" deadlines. (Ill finances at the end of '81 combined with a shortage of input for the Newsletter meant no separate Vol.2, No.4 issue).

It was decided during the various CMA meetings held during the 1981 ICMC in Texas that the CMA Newsletter should give timely information without costly bulk, so we are attempting to condense and optimize the periodical by cutting out some of the "fat" without sacrificing critical or pertinent content.

We will strive to print most of what we receive, although it may be necessary to reformat or trim some of what is given to us for publication. This is in no way meant to discourage you from sending us information about you or your computer music facility's activities. Indeed, we are constantly looking for more input from our members. In particular, we are looking for studio and research reports, brief articles or abstracts, items for the CMA Bulletin Board, concert and conference announcements, etc.

We have devoted most of this issue to reporting on the various CMA meetings which took place over the days of the last ICMC, and to giving you as much information as we currently have concerning the Venice ICMC to be held in September-October of 1982. As always, there are a variety of announcements included, and some items of interest from members are in the "Bulletin Board" section. If you would like to offer suggestions or contributions for future Newsletters, send them to the San Francisco p.o. box.

Please note that we now have additional Board of Directors (W. Buxton, G. Haus, G. Kendall, and O. Laske) as a result of the 1981 CMA election and that James Beauchamp has been unanimously voted the new CMA President by the Board members. As a group, we are committed to creating and promoting

computer music, internationally. We will make every effort to offer CMA's members an effective, useful service.

Finally, we would like to acknowledge and thank Northwestern University and the Dean of the School of Music, Thomas Miller, for donating the postage to cover costs of mailing the next year's CMA Newsletters to our U.S. members. It is greatly appreciated and will certainly diminish the threat of ever increasing postage expenses.

WHAT'S UP....

## 1981 INTERNATIONAL COMPUTER MUSIC CONFERENCE North Texas State University

The 1981 ICMC hosted by Larry Austin and a cast of 100's from the NTSU staff and faculty gave those who attended a wonderful reason to converge on Denton, Texas last November. The Conference went on without flaw and offered an opportunity for registrants to hear a number of guest speakers talk on a wide variety of topics related to computers for music. The concerts and tape-playback sessions were valuable and entertaining and showed that composers who are teaming up with computers are, indeed, producing impressive MUSICAL results.

For a full review of the conference, look for the upcoming issue of Computer Music Journal.... The conference was attended by about 250-300 people. Here's hoping even more of you will make it to the Venezia extravaganza coming in 1982.

### CMA Looking for a Motto, a Seal, and/or a Newsletter Title

That's right....CMA is soliciting your suggestions for a slogan and/or design (graphics or sketch) to be used as our organization's symbol. This could be of use on any number of items (e.g., T-shirts at ICMC '82, stationary, CMA publications, etc.).

Also desired are suggestions for the title of the CMA Newsletter.

Send all entries (slogans and titles on a postcard, please) to the San Francisco p.o. box. The author(s) of the adopted entries will be announced in Vol. 3, No 3 which will be out in July.

## Bibliographies, Books, Records, Resources

### A BIBLIOGRAPHY OF COMPUTER MUSIC -- A Reference For Composers

Sandra L. Tjepkema  
University of Iowa Press  
October 1981  
294 pages, ISBN 0-87745-110-9  
\$17.50

This is a bibliography on par with the earlier MUSIQUE ET INFORMATIQUE: An Indexed Bibliography, by Marc Battier. Tjepkema's is updated and includes about 1,000 references on the art and science of computer applications to music. A subject cross reference is included making it far less trouble to make way through the alphabetic (by author) listings. Definitely worth checking out. See also an upcoming issue of Computer Music Journal for a review.

A Bibliography of Computer Music  
Cheryl Ewing Storey  
Pub. by North Texas University Music Library  
for The 1981 International Computer Music Conference

This is a nice work-in-progress being put together and which was distributed to registrants at the last ICMC. So far it contains about 450 listings organized alphabetically by author but no cross-reference. Great for perusing. For further info concerning this work, contact Cheryl E. Storey, Box 12857, NTSU, Denton, TX 76203

Contact List of Electronic Music (CLEM)  
P.O. Box 86010  
North Vancouver, British Columbia  
CANADA, V7L 4J5

Alex Douglas' eclectic list of new music periodicals, independent record companies, organizations, etc. You'll find addresses and brief, casual descriptions of the above, ranging from Computer Music Association, Computer Music Journal, New Music Distribution Service Catalogue, etc. to Trouser Press, Throbbing Gristle, Rough Trade, Sexy Records. A somewhat oblique and interesting mixture, to say the least. Worth the \$1.00 per issue to North America, \$3.00 for overseas, airmail, and Mr. Douglas will barter (send a tape, magazine, score, etc for a trade). So far we've received two issues. It's an informal contribution to the field, and it's entertaining reading.

Electronic Synthesizer Sound Projects  
c/o The Sound House  
P.O. Box 37b  
East Molesey  
Surrey  
KT8 9JB

We recently received a notice concerning the E.S.S.P. which offers a number of services including recordings, papers, books, and studios for electronic and computer music. To get on their mailing list, just send them a card with your name and address info. They are currently preparing to set up a data network with Telex or Viewdata which would allow one to receive "on-line" information pertaining to new music.

#### Barry Truax on Disc

Two albums featuring the electroacoustic and computer music of Barry Truax are available through Melbourne Records (a division of Waterloo Music Co. Ltd., Box 250, Waterloo, Ontario, CANADA N2J 4A5). Order numbers are SMLP 4042/43 and contain the pieces Love Songs (1979), Androgyny (1978), The Blind Man (1979), Aerial (1979), Ascendance (1979), and Arras (1980). Also offered on SMLP 4033 are several other works by Truax. Contact Melbourne Records for price and order details.

#### NEWCOMP Concerts

The New England Computer Music Association (NEWCOMP) has gotten off to a to a running start. Formed by Otto Laske and Curtis Roads about one and a half years ago, the group has sponsored a variety of concerts at the Village Street Theater, 27 Village St., Somerville, MA (near Cambridge). Recently, a concert was presented featuring works by Roads, Chowning, Dashow, Lansky, Cann, Young and images by Bill Pate. For further information write to them at 926 Greendale Ave., Needham, MA 02192, Phone (617) 449-0781.

Mills College Music Department  
Center for Contemporary Music (CCM)  
5000 MacArthur  
Oakland, CA 94613  
(415) 430-2191

#### A SEMINAR IN FORMAL METHODS

A series of lectures by a variety of artists working with technology and the arts is being offered by Mills' on Thursday evenings at the CCM facility. Larry Polanski and David Rosenboom have organized this series of speakers ranging from Larry Cuba and Scott Kim (specializing in computer graphics) to J.A. Moorer and Don Buchla (computer music). The seminars will be held from January through April, 1982. For further information and a schedule contact Mills College at the above address.

#### LISP, LISP, LISP ....

The ACM is sponsoring a symposium on LISP and Functional Programming to be held in Pittsburgh, Pennsylvania, on August 16-19, 1982. For information concerning the conference and local arrangements contact Guy L. Steel, Jr., Computer Science Dept., Carnegie-Melon University, Pittsburgh, PA 15213

The University of California, Berkeley has formed the FRANZ LISP USER'S GROUP which held its first meeting on August 21, 1981. The group resolved

to publish a newsletter in an attempt to give coverage to the wide range of software being developed in LISP, in particular, outside Berkeley. If you are interested in having your name added to the mailing list, or if you have contributions for the newsletter, contact either Richard Fateman or Robert Wilensky c/o the Dept. of EECS, University of California Berkeley, Berkeley, CA 94720, Net address: ucbvax!fateman@berkeley or ucbvax!wilensky@berkeley

#### THE LISP MACHINE MANUAL

Daniel Weinreb and David Moon

Fourth Edition, June 1981

471 pages, Symbolics order number LMM-4

\$20.00

The following was taken from the book review found in a recent ACM SIGART Newsletter....

This 471-page, softcover manual describes the programming language and software environment of the Lisp Machine developed at M.I.T.'s Artificial Intelligence Laboratory over the past 8 years. The Lisp Machine is the result of a successful experiment in computer science: a distributed computing system consisting of a network of powerful 32-bit personal computers, implemented with custom hardware and software as complete, interactive graphical workstations.

The Lisp Machine Manual is the language reference manual for the Lisp Machine dialect of Lisp. It features extensive explanation of the unique features of the language, as well as detailed documentation of the functions, special forms and macros in the basic system. The manual also documents system facilities such as storage management, input and output, multiple processes, multiple name spaces, automatic system generation and patching tools, and some of the user interface facilities. Separate documentation will be available for the window system and for major application programs.

The Centro di Sonologia Computazionale of Padua University and the Laboratorio Permanente per l'Informatica Musicale of the Venice Biennale, under the auspices of the Associazione di Informatica Musicale Italiana, are pleased to announce that the sixth International Computer Music Conference 1982 will be held, for the first time in Europe, in Venice, ITALY from September 28 through October 2, 1982.

### Major Topic Areas

This conference will cover the same traditional topics as preceding ICMC's, such as 1) Computer Composition; 2) Algorithms and Compositional Processes; 3) Synthesis Techniques; 4) Synthesis Hardware; 5) Computer Music Systems; 6) Acoustics and Psychoacoustics; 7) Sound Analysis; 8) Musical Analysis; 9) Computer Assisted Research in Theory and Musicology; 10) Music Input Languages and Data Structures; 11) Graphic Representation of Music; 12) Digital Audio; 13) Studio Reports; 14) Personal Computer Applications to Music; 15) Computer Assisted Music Education; 16) Applications for Live Performance.

### Conference Activities

In addition to the presentation and discussion of papers, conference activities will also include meetings of special interest groups, presentation of prototypes, special demonstrations, exhibitions of computer music systems. A number of concerts are scheduled for the Conference, as well as a tape playback room. Composers, musical critics, scholars and scientists will discuss the most significant topics featuring the science-music and arts-technology relationships. The official languages of ICMC '82 will be in ENGLISH and ITALIAN

### Submission of Papers and Tapes

Proposals to the ICMC for presentation of papers, tapes or live performances, and exhibitions or special installations must be received NO LATER THAN APRIL 30, 1982. PROPOSALS RECEIVED AFTER THIS DATE CANNOT BE CONSIDERED.

Papers: To deliver a paper, submit a two page abstract (figures included) on two separate phot-ready sheets (written area format: 160mm x 240mm). The first sheet must be headed by the title, and the author's name, affiliation, address, telephone and/or telex numbers. Along with the abstract, please answer the following questions concisely on a single, separate sheet:

- a) Into which of the above-mentioned areas of interest does your paper fit? (give number, or specify if other).
- b) What is the problem addressed by your paper?
- c) What, if any, is the novelty of the paper?
- d) Does it check and/or expand any previous work? Which one(s)?
- e) Detail special requirements (slide and/or overhead projector, tape recorder (give tape format information), etc.)

Papers should be limited to 20 minutes read-time.

### Tapes and Compositions

To present tapes or compositions for live performances, send tapes and/or scores along with a 200-word summary describing the computer's role in the work. Specify the composition date, and if the performance will be a premier. The author's biography, one recent photograph and the program notes should be sent on two separate, photo-ready sheets, under the same conditions as apply to the papers. Tape formats are restricted to 1/4 inch tape, 2-track stereo or 4-track quad (please specify track configuration and loudspeaker disposition), tail-out, 19 cm/sec or 38 cm/sec, on a reel. Specify if DBX-coded.

All abstracts, biography and program notes should be in ENGLISH, preferably with ITALIAN translation.

## Exhibitions and Special Installations

To present an exhibition or a special installation, detail clearly its nature and intent, space and length of time requested, and characteristics or technical requirements.

Notification of acceptance will be given by June 30, 1982.

## Additional Activities

At the time of the Conference, other meetings of interest on related topics will be held in Italy. For participants and accompanying persons, sightseeing tours of Venice and the lagoon islands are scheduled, as well as excursions to the neighboring towns.

## Scientific and Musical Secretariat

For additional information contact:

Segreteria Turistico: for all questions concerning hotel accomodation

Segreteria Artistico-Musical: for all questions and submissions of musical materials (scores, tapes, etc.)

Segreteria Tecnica: for all questions and submissions of papers, reports, etc.

The address for each is the same, given below:

1982 INTERNATIONAL COMPUTER MUSIC CONFERENCE  
SETTORE MUSICA  
LA BIENNALE DI VENEZIA      PHONE: 041-700311  
CA' GIUSTINIAN (S.MARCO)      TELEX: 410685 BLE-VE-I  
30100 VENEZIA - ITALIA

## Registration and Hotel Accomodations

Registration: (Note - US\$1.00 equals approx. 1,000 Italian lire)

50,000 Italian lire, regular fee - 70,000 after August 31, 1982

20,000 Italian lire, student fee - 30,000 after August 31, 1982

Registration and hotel reservation forms will be sent with the next brochure.

For Registration and Hotel Accomodation

C.I.T.  
ICMC '82 REGISTRATION AND HOTEL ACCOMODATION,  
PIAZZA SAN MARCO 48  
30124 VENEZIA - ITALIA

The following is the latest information we have received from CMA's Italian-based VP, Jim Dashow concerning hotel and hostel accomodations for the 1982 ICMC. Included here, also, are some miscellaneous and useful tidbits which Dashow included for those of you planning to attend the Venice Conference in September.

## Concerning the Conference Location:

The bulk of ICMC '82 will be on the island of Lido, not the main, famous group of islands where one finds San Marco and the Grand Canal, etc. Transportation from Venice to Lido is very regular. Boats get you there from San Marco in about 15

minutes. If anybody decides to get a room in Venice rather than on Lido, the only problem will be the fairly irregular late-night boat service, but we hope to arrange schedules so that this won't cause great problems.

### Concerning Hotels, Youth Hostels, and Pensione:

Most of the hotels being arranged through C.I.T. (see address, above) are know as 3rd category, and run around 30,000 lire/night (= \$25.00 to \$30.00) for a single with bath and breakfast (coffee and roll), most within walking distance of the huge cinema we're getting for the conference. Doubles are roughly 50,000 lire, triples are 70,000 lire. These will be among the standard arrangements for anyone writing the C.I.T.

You can ask C.I.T. specifically for a pensione or a 4th category (4a categoria) hotel which will be less, around 20,000 lire for a single. Most of these places cater to people in 2's and 3's, singles will be more difficult to obtain, and in many pensione arrangements, the bathroom is "down the hall".

Concerning Youth Hostels, Dashow has sent the following information. Note that many of these lock the doors around 11:00pm which could cause obvious problems. Jim discourages people from staying in the places listed below if only because it will severely limit wanderings around and participation. All are heavily populated during the summer-fall season, so if anybody wants to stay there they should start reserving space immediately. Here are the youth hostel addresses and some facts about each:

#### Alternative Accomodations

Ostello della Gioventu (youth hostel)  
Associazione Italiana Alberghi per la Gioventu  
Comitato Regionale Veneto  
S. Marco 5043  
30124 VENEZIA - ITALIA  
tel. 041 704414

Notes: no service, closes at 11 pm, 30 persons per room, probably around 7,000 lire/night (= \$5.90), must reserve NOW, send 30% deposit, write first, meals available at 4,000 lire each (= \$3.35)

Domus Cavanis (student dormitory)  
Accademia 912  
30100 VENEZIA  
tel. 041 87374

Notes: closes by midnight, around 7,500 lire/person/night (= \$6.30), 2 or 3 beds per room, minimal or no service

Domus Civica (dormitory style)  
San Polo 3082  
30125 VENEZIA  
tel. 041 27139

Notes: around 7,500 lire/person/night, no services, closes at 11:30pm, doubles and singles available.

#### Flights and Travel

The Computer Music Association is in the process of organizing a flight (or flights) from the U.S. to the Conference. If you are interested in receiving the flight plans as they materialize, please send a SASE to: COMPUTER MUSIC ASSOCIATION, P.O. BOX 1634, SAN FRANCISCO, CA 94101-1634, ATTN: ICMC '82 - FLIGHT PLANS



Minutes from the  
Computer Music Association  
Annual Meeting

November 6, 1981

Thom Blum began the meeting by thanking Larry Austin and the other conference hosts for their efforts. He announced the names of the new board members and officers, including a new office of membership chairman. Officers will be elected for a two-year period.

John Strawn gave the treasurer's report. Since dues at present do not cover expenses, it is necessary to raise dues. This increase is essential for the production of the newsletter and CMA publications and for postage. The new annual membership rates, effective January 1, 1982, are US\$10.00 for students, (Editor's Note: We have since reconsidered, due to the fact that some of the postage is being covered by Northwestern U. Beauchamp has recommended lowering student rates to US\$8.00. We will try this out effective immediately). US\$12.00 regular, US\$30.00 sustaining, and US\$50.00 for institutions. Strawn urged all International Computer Music Conference (ICMC) participants to join CMA and to take the CMA Newsletter and applications to their local music, engineering and computer science libraries. He reiterated that more support will translate into more services.

Regarding the CMA Newsletter, Blum felt the need for guidelines that the editor could use in choosing material. Particularly, the difference between material for the Newsletter and for the Computer Music Journal, needs to be defined. The Newsletter can include timely information, announcements, and a classified ad or "bulletin board" for members. He encouraged members to submit items and ads for publication.

Blum announced that order forms, placed in the ICMC folders, were available for CMA Publications, including the proceedings of the 1977 and 1980 Conferences.

Curtis Roads gave a report on the Computer Music Journal, including an announcement of the editorial board members. While subscription has been respectable, a 50,000-piece issue is going out, to attract new subscribers. He invited the ICMC registrants who don't subscribe to do so.

The second part of Roads' presentation concerned the Journal's editorial policy. An international journal, covering all aspects of computer applications to music, it tries to present both tutorial and advanced articles. The board wants review and more tutorial articles. Mathematical equations are sometimes necessary but are discouraged when a more general treatment is possible.

Concerning specific issues, it is too expensive to offer reprints of individual articles. Vol. 5, No. 3 will be here, at the ICMC, today in small quantities. In the future, Vol. 5, No. 4 will feature compositional issues, Vol. 6, No. 1 digital audio, and Vol. 7 will cover microcomputers. Roads concluded with a healthy prognosis for computer music, in general: The field is gaining momentum, and costs of computer resources are going down.

After Roads' report, John Strawn, associate editor of the Computer Music Journal, added a few comments. First, he announced that the New York Times has written up the ICMC. Second, he encouraged Europeans to submit

articles, even if not translated in English, although English is preferred.

The next order of business was Blum's announcement of two new committees. One committee, made up of Curtis Roads, Otto Laske, James Dashow, and Thom Blum will investigate the legal possibilities, advantages and disadvantages of forming local chapters of CMA. To explore the relationship between the CMA and the ICMC, another committee has been formed. All previous conference organizers are invited to join this conference committee. Curtis Roads and William Buxton will also be committee members.

Thom Blum invited those who had proposals to host future ICMC's to present these here at the Membership Meeting. Those who are not present today should send a written proposal to CMA. Allen Shindler presented an offer from Eastman School of Music to host the 1983 ICMC or one later. After some discussion, it was passed unanimously that the 1983 ICMC will be held at Eastman. Strawn mentioned that UCLA has expressed interest in hosting a future convention but has not offered a formal proposal. Austin doubted that the NEA was likely to support the ICMC anymore, and Blum suggested getting more private funding. He appealed to those members who are affiliated with the computer industry to approach the appropriate people about offering CMA financial or technical support. Or, to send suggestions concerning fund-raising to CMA.

In a lighter vein, Blum announced the start of a contest for an ICMC motto, seal, and T-shirt design (for distribution at the 1982 ICMC in Venice, Italy). All entries should be sent to CMA.

James Dashow gave a report on the 1982 ICMC, to be held September 29-October 2 in Venice. Since the convention will fall in high season, Dexter Morrill will organize a charter flight from the US to Venice. Patty Wood also volunteered to organize a flight leaving from the US. In any event, Dashow advised making reservations early. April 30 is the deadline for submission of scores and papers. Simultaneous translators will be present at the ICMC, but he encouraged participants to submit their own Italian translations.

Following Dashow's presentation, there were some questions from the members. Jon Appleton wanted to know as soon as possible if the ICMC might expand to five days. Dashow will find out when he returns to Italy. Stanley Haynes asked about the relationship between the Biennale and the ICMC. While the Biennale is a partial sponsor, Dashow explained that it is not selecting scores and papers.

Blum closed the meeting, hoping for a successful year ahead and looking forward to seeing everyone at this year's ICMC, and many others who could not be here, in Venice in 1982.

Respectfully Submitted,  
Dorothy Gross  
Secretary, CMA

Report of the Society for Music Theory Symposium  
on Future Computer Applications in Music Theory, 1981

The Society for Music Theory Symposium on Future Computer Applications in Music Theory was held in Los Angeles, October 30, 1981, chaired by John Rahn. This report will convey, in an abridged form, the discussion that took place.

Rahn began by reading introductory remarks concerning the nature of the meeting and the future of computer applications in music theory. Steven Haflich added some general comments on the aim of the session. Given the previous history of inaccurate predictions of future computer development, he felt that the purpose of the meeting should be communication, not discussion of future possibilities.

Following the prefatory suggestions, participants offered possibilities for future research. David Lewin proposed that computers be used to find relationships not noticed by humans. Kent Williams and Ann Blombach mentioned the benefits of computer assistance in their own studies of musical style. In particular, Williams noted the potential of statistics for giving musicians more accuracy and precision than intuitive judgments. Bo Alphonse added that most theory regarding twelve pitch classes has benefited from computer applications. Currently, he is putting George Perle's theories into a computer, using Allen Forte's pitch-set notation.

While the primary intent of the meeting was not to discuss computer mechanics, certain technical aspects were mentioned. Steven Strunk asserted that the main value of computers was their speed and accuracy. In response, Timothy Kolosick stated that while this was true in theory, the lack of compatibility among institutions was a problem. Gary Wittlich suggested a database be established, and Haflich proposed that at least, a bibliography would be useful. Dorothy Gross will set up a survey, with perhaps the assistance of the Computer Music Association.

Regarding hardware and software, the greatest needs mentioned were computer-driven music printing and a language for music analysis. Among printing systems, the DARMS project includes work on a program for a Diablo-type printer. Another system, already developed, is Armando dal Molin's computer-music printer, oriented toward commercial applications. Two languages for music theory cited were Steven Smoliar's Schenkerian generation program and Jean Bamberger's CAI-oriented software.

Turning away from technology, panel members then discussed the theoretical goals of future applications. James Snell compared musictheory to linguistics, suggesting that theory be compared to the actual musical language. James Meehan felt that computers could allow musicians to learn about theory, and Strunk added that he had made discoveries about invertible counterpoint through his analytical studies with computers. Concerning computer-assisted analysis, Rahn noted that the lack of esthetic considerations, and Carlton Gamer desired a structure for considering multiple implications within music.

Although speed and accuracy is a practical goal, the more important aim was considered to be achieving a better understanding of music. Alexander Brinkman mentioned the lack of artistic values in existing programs. Several participants suggested getting a computer to compose, as a test of theory. But, Rahn and Bamberger cautioned that even if we could use a computer for composition, we still could not say that human composers worked along the same lines. George Stiny defended an understanding of structure, as opposed to process, since structural rules alone can have

benefits, such as identifying authorship, and any discoveries can lead to more meaningful conclusions.

Haflich recommended programs that recreate styles as being a good method of describing musical style. Generally, participants agreed that it was possible to generate simple pieces, but not to recreate larger works. For example, Lewin mentioned that he had a program that wrote good first-species counterpoint, but that composing music with a broader scope was problematic. Bamberger suggested using computers for pedagogical exercises in composition.

Ultimately, many participants suggested that the goal of computer applications should be to understand how humans compose, particularly the recognized masters. Milton Babbitt reminded us that we are quite ambitious, since related fields are far behind our goals. For instance, computer-assisted studies in natural language are only up to sentences. Allen Forte concluded by making a case for good analytical studies, per se. The meeting ended with no attempt at a summation. Rather, this was intended to be the beginning of an ongoing dialogue regarding computers and music theory.

Dorothy Gross  
University of Minnesota

\*) Lecturers: David Jaffe and Andy Schloss of the Center for Computer Research in Music and Acoustics (CCMA), Stanford University are planning a tour of East Coast colleges to give presentations of the work in computer music currently being done at that facility. If you are interested in hosting such a presentation please contact David Jaffe, Box 4368, Stanford CA 94305, USA or phone (415) 497-4971 / (415) 836-3057.

\* \*) Catalogue: Otto Leake has recently produced a full catalogue of his work which includes lists of his publications, and compositions. For further information on obtaining a copy contact Otto Leake, c/o New England Computer Music Association, 926 Greendale Ave., Needham MA 02192, USA

CMA Bulletin Board is a quarterly Newsletter feature giving members an opportunity to directly offer, receive, or exchange computer music artifacts from other CMA members. If you have works that you want to make available or request, send us a list. Be sure to include your address, medium of the work(s) (and, if determined, the terms of the offer).

Computer Music Association, POB 1634, San Francisco, CA 94101, USA

Please address all inquiries to the appropriate person(s) listed below.

\*\*\* For Distribution \*\*\*

- 1 ) Album: THE EXPANDING UNIVERSE - Realized on GROOVE (Philo Records no. 9003)  
 Terms: \$8.98 (postpaid)  
 Contact: Laurie Spiegel, 175 Duane Street, New York, NY 10013
- 2 ) Tapes: two cassettes  
 Terms: Contact author.  
 Contact: Markus F.P. Aigner, Dorfgasse 30c/01/23, A-6020 Innsbruck, Austria. Note: Please send two ICR's (International Response Coupons) if contacting from Europe, three if outside Europe. This will cover the cost of return mail.
- 3 ) Lectures: David Jaffe and Andy Schloss of the Center for Computer Research in Music and Acoustics (CCRMA), Stanford University are planning a tour of East Coast colleges to give presentations of the work in computer music currently being done at that facility. If you are interested in hosting such a presentation please contact David Jaffe, Box 4268, Stanford CA 94305, USA or phone (415) 497-4971 / (415) 856-3057.
- 4 ) Catalogue: Otto Laske has recently produced a full catalogue of his work which includes lists of his publications, and compositions. For further information on obtaining a copy contact Otto Laske, c/o New England Computer Music Association, 926 Greendale Ave., Needham MA 02192, USA

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Computer Music Association, POB 1634, San Francisco, CA 94101, USA

Alphonse, Bo; Montreal CANADA  
Barriere, Jean-Baptiste; Paris FRANCE  
Barbeau, Louis; Montreal, Quebec CANADA  
Benton, Brad; Austin, Texas  
Berntson, Neil; Valatie, New York  
Biewlaw, Herbert; San Francisco, California  
Bigelow, Mark; Concord, California  
Bradfield, David; Denton, Texas  
Briefel, R.E.; London ENGLAND  
Bryant, John; San Francisco, California  
Buell, Timothy; Richmond Hill, Ontario CANADA  
Buxton, William; Toronto, Ontario CANADA  
Byrd, Roy; Ossining, New York  
Canberra School of Music Library; Canberra City AUSTRALIA  
Chadlam, Robert; Bedford, Maryland  
Chang, D.; Denton, Texas  
Christensen; San Bruno, California  
Clough, John; Buffalo, New York  
Dahlfors, Bryce; Denton, Texas  
Dodge, Charles; Brooklyn, New York  
Drummond, Philip; Flushing, New York  
Eastty, Peter; San Francisco, California.  
Ebcioğlu, Kemal; Buffalo, New York  
Fish, Louise; Jamaica, New York  
Geick, Franklyn; San Francisco, California  
Harris, Craig; Rochester, New York  
Jerrers, Grant; Los Angeles, California  
Jerse, Thomas; Santa Rosa, California  
Jewell, Christopher; Chagrin Falls, Ohio  
Johnson, Donald; Huntsville, Alabama  
Kahrs, Mark; Rochester, New York  
Killam, Rosemary; Denton, Texas  
Levenson, Rene; Honolulu, Hawaii  
Lewin, David; New Haven, Connecticut  
Light, Christopher; Chicago, Illinois  
Lindeman, Osmo; Vantaa FINLAND  
Long, Bill; Atlanta, Georgia  
Lynk, Edgar; Schenectady, New York  
Mason, Charles; Savoy, Illinois  
Mathews, Max; Murray Hill, New Jersey  
McMurphy, John; Dallas, Texas  
McTavish, Jack; Whitehorse CANADA  
Meeth, John; Kayenta, Arizona  
Meehan, James; Irvine, California  
Montalto, Richard; Denton, Texas  
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Provisor, Doug; Los Angeles, California  
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Saklad, Howard; Bristol, Connecticut  
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 Sparks, Linda; Baton Rouge, Louisiana  
 Stanford University Libraries; Stanford, California  
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 Tessmann, Harold; Dearborn Heights, Michigan  
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 Universite de Paris VI; Paris FRANCE  
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 Vickers, Earl; Franklin Park, Illinois  
 Viljamaa, Panu; Naantali FINLAND  
 VonEhr, James; Plano, Texas  
 Watson, Paul; Denton, Texas  
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