

Minutes

Third Meeting of the Committee on Electronic Information and Communication (CEIC) of the International Mathematical Union held in Vienna, October 5-7, 2000

1. Membership and Participation

Peter Michor (Austria), Jonathan Borwein (Canada, 4-8.10), John Ewing (USA, 4-8.10), Jonas Gomes (Brazil, not present), Martin Groetschel (Germany 5-8.10), Wilfrid Hodges (UK, 5-8.10), David Morrison (USA, 5-8.10), Kapil Paranjape (India, not present), Alf van der Poorten (Australia, 4-8.10), Alexei Zhizhchenko (Russia 5-8.10), Qing Zhou (China, 4-7.10), Wolfram Sperber (Germany 5-8.10, invited).

2. Preliminaries

Agenda, Minutes of the previous meeting.

3. Math-Net

Two presentations were given on Math-Net.

1. Wolfram Sperber spoke on Math-Net in Germany: the regional concept, technical aspects, new layout of secondary home pages, new meta-maker for preprints, harvesting now via 9 regional modes.
In the discussion, concern was expressed that the scheme is too complicated to be easily extended over the whole world.
2. Martin Groetschel spoke on Math-Net International: What do we have, what is to be done? some progress has occurred in France, Austria, Japan. Brazil had been promising but the key person (Jonas Gomes) has left for industry.

In subsequent discussion the following matters arose:

1. An Agreement between CEIC and the European Physical Society was proposed. The Agreement was approved unanimously.
2. An Agreement between CEIC and a new MathDoc cell at Grenoble as Math-Net service provider was proposed. The agreement was accepted.
3. An Agreement between CEIC and the preprint indexing service MPRESS (Osnabrueck) as Math-Net service provider was proposed. This agreement was accepted.
4. Dissertations Online is in preparation in France and in Germany; this could be a Math-Net service when ready. Members of the Committee asked whether Dissertations Online can be absorbed into MPRESS?
5. **Duties of a Math-Net member**
The formal duties of a Math-Net member are
 1. to designate an information coordinator;
 2. to install the Math-Net page; and
 3. to generate metadata at least for preprints and persons.
6. **Technical Advisory Board**
Dave Morrison reported on the activities of the TAB, acknowledging that there has been little email traffic up to now, but anticipating considerably more activity.
7. **Math-Net as a portal**
The Committee was asked whether Math-Net should choose to display links to some useful services such as "integer sequences", "geometric models", featured sites, etc? The Committee did not reach consensus on this issue.
8. The Committee determined that Math-Net services should be decided upon by the CEIC. Members are decided by the membership committee (currently: Martin

Groetschel). Jon Borwein, Dave Morrison, and Peter Michor will act as a test bed for the internationalization of Math-Net (putting up home pages, etc.).

4. **Report on the preprint server arXiv (central service in Los Alamos)**
 Dave Morrison remarked that the server still exists despite fire and spies in Los Alamos! There is a moratorium on establishing new mirrors, and a backlog on software upgrading, due to manpower shortage. Growth: there are now roughly 12000 preprints in mathematics, 250/month is the current uploading rate: see www.arXiv.org/Stats/math_monthly.gif for the statistic on journal prices.
 AMS journals provide free abstracts and references online, with links to Math Reviews (MR) and Zentralblatt ZBL. MR looks at some 100000 papers/year and adds 70000 per year to MR. MR-lookup www.ams.org/mrlookup provides a new service where authors can upload intended references to their papers, and the like. The AMS has bought the CM and AMS fonts for TeX in Type 1 postscript form from Blue Sky and has put these into the public realm. The AMS is active in the UNICODE project: there are now 970 mathematics symbols in UNICODE. The AMS is also active in the MathML (the mathematical counterpart part of XML), CrossRef, and DOI (Document Object Identifier activities. The last is a joint activity with publishing houses and the music industry.
5. **Report on activities of the Canadian Mathematical Society (Borwein)**
 The CMS publishes four journals, all are online, but not free. There is the successful new Pacific Institute of Mathematical Sciences (PIMS) of which also the University of Washington (USA) is a member. A sort of "Oberwolfach in Alberta" is being created. Most Canadian public money for electronic publishing projects is locked up in huge digital library projects.
6. **Report on activities of the London Mathematical Society (Wilfrid Hodges)**
 There are now 10 full staff members, the LMS had to move to new premises. They run one fully electronic journal.
7. **Report on the Deutsche Mathematiker Vereinigung (Groetschel)**
 The DMV is an all volunteer enterprise with 1/2 employee. Details had been mentioned in Groetschel's talk.
8. **Report on the European Mathematical Society (Michor)**
 The European Mathematical Trust is being founded. It will run the Publishing house of the European Mathematical Society. It will not publish new journals, but will help to market existing journals.
9. **Report on the Australian Mathematical Society (Van der Poorten)**
 The AustMS publishes three learned journals and a house journal; it has *Referativny* journal, *Doklady Nauk* are in poor shape. About 50% of all papers by Russian mathematicians still are published in Russia.
10. **Report on Copyright Matters (Hodges)**
 1. WIPO (World intellectual property organization), a UN-organization, has published guidelines which are just now being voted into different national laws. The copyright material ("checklist") of the CEIC (Wilfrid Hodges' work) will be enhanced by an executive summary, containing a list of appropriate expectations of an author of a journal research article. The material could then be discussed by the IMU, sent to ICSU, to UNESCO, and so on. Wilfrid Hodges and John Ewing will work on this, with Peter Michor pressing the matter.
 2. The Committee discussed what copyright statement should be put on her/his personal homepage by a mathematician. For example, "The material on this homepage is for fair use only, the material is copyrighted by various publishing houses," etc.). The Committee did not reach any useful consensus on this issue.
 3. The Committee proposed calling to mathematicians with homepages, and to older mathematicians, that they take on the task of scanning their older reprints to put them online, thus creating an online version of their collected works. Libraries could be asked collect such "Works". It was pointed out that one should appoint an executor of

one's intellectual works. Alf van der Poorten agreed to attempt to create a How-To Page explaining the technical details of a sensible approach to scan articles and put those scans online. One might hope for, say, an article in the Notices of the AMS, and elsewhere, as follow-up. Qing Zhou was asked independently to produce a How-To Page, using just public domain tools.

11. CEIC website (Borwein)

It was asked whether the look and feel of the site, at www.ceic.math.ca, must be similar to Math-Net. There was no clear consensus on this point. It was decided that, of course, the site should be linked to by Math-Net and by the IMU home page. It was noted the IMU home page is now housed in IMPA, but that its maintenance could be improved.

12. IMU world directory (Groetschel)

The Committee noted that there is some em Martin Groetschel will inquire about the present state of play, and will suggest action if necessary. In any case the CEIC will again discuss these issues at its next meeting, preliminary to presenting its recommendations to the Executive Committee.