

**MINUTES OF THE FIFTH MEETING OF  
THE COMMITTEE ON ELECTRONIC INFORMATION  
AND COMMUNICATION (CEIC)  
OF THE INTERNATIONAL MATHEMATICAL UNION  
HELD AT THE MORRIS J. WOSK  
CENTRE FOR DIALOGUE,  
SIMON FRASER UNIVERSITY, VANCOUVER,  
FEBRUARY 15–17, 2002**

**Membership and Participation.** Peter Michor (Austria), Jonathan Borwein (Canada), John Ewing (USA), Martin Grötschel (Germany), Wilfrid Hodges (UK), David Morrison (USA), Kapil Paranjape (India), Alf van der Poorten (Australia), Alexei Zhizhchenko (Russia). By invitation: Laurent Guillope (France), Patrick Ion (USA), Alejandro Joffre (Chile), Greg Kuperberg (USA). Did not attend: Jonas Gomes (Brazil), Qing Zhou (China). A number of Canadian visitors attended all but the last session of the meeting.

The CEIC met on Friday, February 15 (commencing at 10:00) and through Sunday, February 17. Saturday, February 16, consisted of a CEIC Workshop “Managing digital information in mathematics: From journals to the grey literature”.

The meeting concluded with a frighteningly expensive dinner, on the evening of February 17, at which members ate heartily and plotted the future of the Committee.

1. MEETING OF THE COMMITTEE

1.1. **Preliminaries.** Agenda, Minutes of the previous meeting.

1.2. **Topics for the report on past activities.** The Committee Chair, Peter Michor, briefly listed a subset of items to be mentioned in the eventual report to the EC of the IMU and to the General Assembly.

1.2.1. Workshop in Berlin

1.2.2. Conference in Berkeley

---

Typeset March 24, 2002.

Version 0.7 by PM, February 17, 2001; Version 0.9 by AvdP, February 22.

- 1.2.3. Workshop in Vancouver
- 1.2.4. Math-Net Charter, new homepages
- 1.2.5. The copyright article
- 1.2.6. The call to mathematicians to put more primary material online
- 1.2.7. Advice on the World Mathematical Directory
- 1.2.8. Presence of representative (Alfvdp) at the UNESCO conference

### 1.3. General discussion of the future of CEIC.

1.3.1. *More International Cooperation.* One of the main aims of the next CEIC should be foster further international cooperation between the main international players: arXiv, Math-Net, MPRESS, EMIS, Mathematical Societies active in publishing. In particular CEIC should be a meeting ground for the most active persons in non-commercial (and commercial) electronic publishing, including and concentrating on preprint servers.

1.3.2. *Recommendations.* In accordance with its remit, CEIC spent a substantial part of the meeting discussing a list of recommendations on best practice in the field of electronic information and communications and immediately related issues. Recommendations will have reached final draft form for the next meeting of the EC, for its eventual endorsement.

- (1) The issue of versioning of archived articles.
- (2) Archiving articles and on otherwise making them available on the web.
- (3) Bundling and related behavior of journal publishers.
- (4) Recommendations specific to developing countries

1.3.3. *The World Digital Mathematical Library.* Some half dozen centres in various countries now have projects to scan the existing mathematical literature thus making it available in digital form (retrodigitisation). This current development is of great importance for mathematics and warrants the attention of the IMU.

The value of these efforts will be much enhanced if they are truly international and if there is some overall co-ordination (inter alia to minimise duplication and to identify best practice) and facilitation.

*CEIC urges the IMU to accept a central role in the co-ordination and facilitation of the World Digital Mathematical Library project. Presuming that the issue is deemed within the terms of its mandate, CEIC offers the expertise and experience of its members to act on behalf of the IMU.*

1.3.4. *Mathematical Copyright.* The Committee noted that the IMU/CEIC statement prepared by Wilfrid Hodges, and links pointing to it, is almost the only web item on mathematical copyright and general copyright guidelines. Nonetheless, there are related matters of interest to mathematicians on the web. It was therefore agreed that the CEIC website be enhanced and updated by preparing brief summaries of and links to such items. Alfvdp agreed to take eventual responsibility for these matters.

1.3.5. *Access for third world countries.* Principal centres have problems similar to those experienced in the west. More generally, however, infrastructural deficiencies are commonplace. These may include basic connectivity problems because of an unreliable telephone system, inadequate capacity servers, low local bandwidth (so that North American and European sites may be more readily available than are local mirrors); thus archival access is problematic. It is typical for many scientists to have access only to the one machine for their common use. Certainly, anecdotal remarks tell of scientists obtaining more convenient access from internet cafes than from departmental machines. Naturally, there is real conflict between the desire and need to use common computers for apparently ‘non-mathematical’ activity (e-mail and web access) and their use as a research technical tool.

1.3.6. *Math-Net.* Martin Grötschel reported on recent developments which are to culminate with a press release to be issued after the EC meeting of April 12 announcing that the Math-Net pagemaker for homepages of Institutes, Departments, and Centres is now available.

The CEIC agreed that it is now appropriate to proceed with work on a similar Math-Net personal homepage and asked each committee member to oversee the making of several institutional homepages before the announcement in April.

## 2. FINAL CEIC CLOSED WORKING SESSION

Acting on an e-mailed request of David Mumford, the CEIC rediscussed the Budapest Open Access Initiative (BOAI) (<http://www.soros.org/openaccess>) noting that parts of the BOAI of course coincide with advice and recommendations of the CEIC, but more particularly remarking that its more impassioned demands are less than totally realistic. Jon Borwein was deputized by the Committee briefly to detail these issues to David Mumford.

In reconsidering its recommendation that mathematicians be encouraged to scan their old (pre- $\text{\TeX}$ ) papers, and to place them on the web, the CEIC agreed to collect a variety of personal descriptions and discussions of how

such a project had been completed and to make stories available on the CEIC pages.

It was reported that agreements had been made to have the ICM proceedings available as arXiv overlay. [Comment: I think I may have been asleep at that moment. Please restate correctly. *AvdP*].

#### APPENDICES

- [1] Program of the Workshop on February 16, 2002.
- [2] Ownership of scholarly Literature (J. Ewing)
- [3] Final version of the recommendations (living documents, online)