

Minutes of the second 2006 CEIC meeting Halifax, December 2-4, 2006

Note. We have decided to experiment with a much more informal minuting process than in the previous two cycles. This is consistent with the current structure and mandate of the committee. JMB and MD

Attending: Ball, Borwein (chair), Doob, Rehman, van der Poorten.

Regrets: Eisenbud and Ewing (who attended on Monday by Skype)

On the morning of December 2nd an [Informal Workshop on Electronic Journals](#) was held which engaged about ten individuals from Atlantic Canada who are actively involved in electronic and traditional mathematical publishing. The meeting proper started at noon with a [Working Lunch](#) which finalized the Agenda.

14:00-17:00 Session 1 The chair reminded the committee that in the period 2007–2010 we shall function principally as an advisory committee and must raise money from our principal societies/sponsors for any cost intensive activities. We discussed

- ▶ The CEIC Budget
- ▶ Terms of Reference 2007 – 2010 as finalized in 2006
- ▶ Roles of CEIC Members 2007 – 2010. Each of the new members has a distinct core competence.
- ▶ Membership 2008 – 2010
 - o It was agreed on the desirability of adding one or two extra members for better balance of age, geography and knowledge of IT. The chair agreed to circulate information about potential new members.
- ▶ Replacement for CEIC-Plus
 - o We need to use a group of interested folks as a sounding board but the decision was to rebuild such list from scratch. Each member will be asked for a few suggestions
- ▶ Report on the [CEIC Presentation](#) at the GA in August (AvdP).
 - o The report was well received

We then turned to a

Review of Current CEIC Activities

- ▶ [IMU on the Web](#) (AvdP, JMB). Various topics were discussed some of which are among the 17 extant postings but should be revisited. The initiative seems well worthwhile and will be continued. This is returned to in the Action Items below.
- ▶ [FWDM](#) and [EWDM](#) (JMB) The project has moved into maintenance stage. New lists will be added as appropriate and if the given society's data are in reasonable form.

- ▶ Math-Net and [Math-Net Services](#) This was a very valuable project which has outgrown its utility in part because of external changes such as the emergence of Google and Yahoo, and the cost of sustaining such activities. It was agreed that a such projects should be explicitly 'closed' and that a pice on IMU on the web should be written regarding such.

The day concluded with a congenial dinner at Sweet Basil.

Session 2 On Sunday December 3 between **9:00-12:00** discussion of extant activities continued.

- ▶ [WDML](#) and [Registry](#) (MD, UR). It was decided to build a stand-alone portal which would include Ulf Rehman's registry, the one produced at Math Reviews, and others (such as Google Scholar?) as appropriate and would indicate their scope and intentions. Harvesting metadata will be further considered by Ulf Rehman and Michael Doob.
- ▶ A Content Management system and a long-term home for IMU server were discussed along with the need for archiving of IMU records. Recommendations were formulated later in the day and are appended.

We turned to

- ▶ Potential Best Practice Recommendations. Topics in need of a serious discussion include:
 - Obligations of Authors, Referees, Editors and Publishers (AvdP will take the lead at some point)
 - Copyright for video/audio: (JMB will take the lead). The intended audience includes
 - Organizers of events
 - Authors of books or multimedia
- ◆ Potential new topics for IMU on the web include
 - Maintaining, archiving and closing web resources. (JMB)
 - A description NIST's DLMF after it is released. (JMB)
 - Aaron Krowne has agreed to write on [PlanetMath](#) and its plans
 - The use of metric-based assessment needs an article aimed at, say, the Mathematical Intelligencer, and at that point a column. This was not a task anyone volunteered to take the lead on. We might ask Andrew Odlyzko.
 - We will ask Jim Pitman to write on his [MathPeople](#) project
 - IP rights and Security issues also merit a column as does Copyright for video/audio

Session 3 14:00-17:00 Discussion turned to **emerging and/or perennial and interrelated Issues** such as the following

1. Software cataloging
2. Metrics and assessments: how and why?
3. Archiving and maintaining web assets, especially for the
 - o ICM, ICMWE and General Assembly web sites.
4. Retro-digitization of ICM and ICME proceedings
5. Mathematical search engines: do we need them? Especially in light of Google, Yahoo and Microsoft projects. The consensus was we do need them and should encourage good projects such as will consolidate current Mathematical content on the Web: e.g., MathPeople, MathWorld, PlanetMath, Wiki's, MAA Gateway, Digital Universe etc
6. Indexing of mathematical web pages, copying of such pages, etc

We then broke into two groups. Ball, Borwein and Van der Poorten drafted recommendations on archiving for the IMU (attached below) while Doob and Rehman looked in more detail at the issues in building a registry portal. The latter two built a quick test page that accessed both the journals on the AMS site and the books contained in Ulf Rehman's collection. This resulted in the first Action Item given below.

The day ended for some with a fine dinner at the Five Fisherman, somewhat truncated by the Chair making a 21.30 Access Grid presentation to an AMS [Access Grid](#) Conference at La Trobe University in Melbourne. John Ball and Alf van der Poorten also participated.

Session 4 on Monday December 4 from **9:00-11:00** a summation session was held. Brief discussion took place about possible activities for committee activities at ICIAM07, CML08, and elsewhere.

- ▶ There was no enthusiasm for organizing special sessions but it was viewed as desirable to produce updated material such as: a poster, bookmarks, and a simple flier along with a self-contained lively but light Website for FWDM, WDML, IMU on the Web, and Best practices; aimed at the public.
- ▶ The next meeting will be hosted by John Ewing in Providence in October or November 2007

We then turned to review and discussion of **Action Items:**

1. WDML Public Registry:

- Create a better WDML/Registry Splash page
- Add pointers to
 - o Ulf's data (books plus journals)
 - o AMS (mostly journals)
 - o proprietary (Google, etc)
 - no more CEIC owned-resources
- Assure OAI-PMH implementation for harvesting metadata

2. Proposed four year project leading to **content management system** for IMU by the time of the next ICM. John Ball will ask the EC to request for a report from the CEIC (to be led by Doob and Borwein and prepared by July 1, 2007.) It will consider:

- Estimated costs
- Finding a location (Helsinki?)
- Adding mirrors
- Data conversion (to pdfs)
- Sensitive documents? Time locks?
- Retrodigitization earlier sensitive materials?
- Curitage of CEIC and other web pages

3. **Metric-based-Assessments** It was viewed as desirable to analyze different metrics (citation, minimal publication units) and their impact on mathematicians in various settings. This is clearly pressing in the UK and in Australia particularly, but it was seen as tangential to the CEIC's remit. We suggest that the IMU should aim for an article for distribution (perhaps in the Mathematical Intelligencer) and to produce a report within six months, but this would be best produced by a distinct sub-committee formed between CEIC and EC.

4. **Versioning and archiving** It is clearly desirable to

- Archive old IMU records
- Archive ICM web sites (at least back to 1998)
- Archive minutes of General Assembly
- To plan for maintenance and to include closure planning (not leaving unsupported projects hanging, such as perhaps Math-Net)
- Retro-archivization requires an archivist.

5. **Mathematical Content on the Web** Should we contribute to some sites (e.g., the Digital Universe/Encyclopedia of Earth)?

6. **Additional Best practices** should include

- Archiving practice suggestions/ Closure planning (after IMU activity has started)
- Copyright for video/audio: (JMB,JE) aimed at organizers of events and authors of books or multimedia
- Advice to a young author regarding obligations and roles of **Authors, Referees, Editors and Publishers** (AvdP)

7. The chair will send a letter to ICIAM/SIAM urging they initiate a **registry of software depositories**.

8. Jon Ball will inform the EC that wish to bring one or two **younger IT-savvy members** onto the CEIC in the next few months.

9. **IMU on the Web articles** in upcoming issues will include:

- Maintaining, archiving and closing/reducing effort web resources (after MathNet is so treated)
- NIST DLMF (JMB)

- Planet Math (Krownne)
- Metrics and assessments (after article is written)
- MathPeople (Jim Pitman)
- IP rights and Security issues

Jonathan Borwein and Michael Doob
December 12, 2006

APPENDIX 1

A proposal for IMU Archiving This document proposes a protocol and mechanisms for archiving IMU material, particularly material existing in electronic form. The IMU has a physical archive located at the University of Helsinki. This comprises paper files covering 1952 to at least 1990 and some earlier material (see Lehto's article www.mathunion.org/Publications/Bulletins/39/past+present.html). A history of the IMU up to 1994 is to be found in O. Lehto, *Mathematics without borders*, Springer 1998.

1. The nature of the material potentially to be archived includes:
 - a. Email and paper communication from and to members of the Executive Committee (EC).
 - b. Financial records.
 - c. Statutory material.
 - d. Material arising from the IMU prize committees: Fields, Nevanlinna, Gauss prizes.
 - e. Material arising from the ICM Program Committee.
 - f. Material arising from the IMU and the ICMI Nomination Committees.
 - g. Material arising from other IMU Commissions and Committees (such as CDE/DCSG, ICMI, ICHM and CEIC).
 - h. Material arising from the organization of the ICM.
 - i. Proceedings and other records (including video, audio) from the ICM and ICME.
 - j. Agendas, Minutes, Bulletins, Circular letters, IMU etc.
 - k. Membership records.
 - l. Other written reports and position papers (e.g., ICMI Studies).
 - m. Periodical snapshots of associated Web sites.

2. **Requirements of the archive include**
 - a. Preserving and providing source material for future scholars and historians.
 - b. Providing data and other information for use by current IMU officers and committees.
 - c. Assuring confidentiality or access as appropriate.

3. **Recommendations**
 - a. A full archive catalogue needs to be produced. In particular we need to identify the status of material since 1990.
 - b. Location of physical and digital archives need not be the same but each must be appropriately assured; cost, access, longevity, maintenance etc.
 - i. Relation to a potential permanent IMU office needs to be determined.
 - ii. Mirroring of the electronic archive should be mandatory.
 - c. Access and embargo issues. The EC should set up a protocol to decide which material is
 - i. openly available;
 - ii. accessible to specified persons
 - iii. embargoed for a given period; currently prize committee material is embargoed for 50 years. The embargo periods for the Program

Committee and other material should be determined by the EC, and made known.

- d. We urge the EC to develop procedures for releasing embargoed material quadrennially, say at the beginning of an ICM year. This could provide a valuable opportunity for publicity of mathematics and the ICM.
- e. **Retro-archiving.** These recommendations apply first to current material, and second to material from 1994 onwards that may need to be gathered from past officers. The possibility of digitizing the Helsinki Archive should be considered. Specifically, material leaving embargo should be released in digital form.
- f. **Technical details.** We recommend that current electronic materials be stored in an open format, possibly ASCII-based. We recommend that attachments and other auxiliary material (e.g. MSWord, spreadsheets) should be archived where possible in an open format, (for example pdf) as well as in their original form. Any necessary conversion should be handled centrally, perhaps in the secretariat. It is incumbent upon individual officers providing material to be archived to provide adequate documentation describing the nature of the material and highlighting points of significance. Properly and promptly prepared (say, within 6 months of leaving office), such documentation will be helpful to incoming officers.
- g. **Action items.**
 - i. Determination of status of Helsinki archive, including any contractual agreements.
 - ii. Contact past-Presidents Mumford and Palis to ensure that their material is archived.
 - iii. Determine whether all past prize committees have archived their material, and attempt to fill any gaps.
 - iv. Determine which material should be archived and make precise the access and embargo protocols.
 - v. Set in place mechanisms for eventual complete digitization of the IMU archives.
 - vi. Investigate what material leaves embargo before ICM2010, and decide how best to exploit the opportunities this offers.