## Report from two workshops: "Finding Online Information in Mathematics", held in Addis Ababa and Bamako October/November 2010

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As an intitiative from the European Mathematical Society Committee for Developing Countries (EMS-CDC), two workshops was held on the topic on how to find and access online information resources in mathematics. Both workshops were funded by the EMS-CDC and the IMU Developing Countries Strategy Group in collaboration.

The first workshop was held at the mathematics department of Addis Ababa University, Ethiopia, October 19-21 and the second at the CIMPA school held in Bamako, Mali, November 20-21.

Facilitator of both workshops was Anders Wändahl, librarian at the Karolinska Institutet in Stockholm, as well as a member of the EMS-CDC.

## All materials and hand-outs for the EMS-CDC workshops are available at a dedicated webpage <u>http://workshop.ems-cdc.org/</u> where it can be freely downloaded and used.

## Content

- Use of <u>bibliographic databases</u> specific for mathematics; Zentralblatt MATH, MathSciNet, arXiv as well as more general resources like OpenJ-gate.
- Access to pre-/post-/e-prints; arXiv and special topic archives.
- Access to <u>fulltext journals</u>; Open access, retroactive digitization, subsidized access, document delivery. Examples of resources covered: JSTOR, INASP-PERii, HINARI, OARE, AGORA, eIFL, DOAJ, Open Science Directory, eJDS, Bordeaux*thèque*.
- Access to <u>e-books</u>, <u>OpenCourseWare</u>, tools for writing.
- Individual applications for the <u>document delivery services</u> eJDS and Bordeaux*thèque*.
- Institutional applications and setup of different subsidized information resources.

The bottom line of the exposé of resources is that African mathematicians have access to more information resources than they normally are aware of (but also that they will have to work hard for their treats). A paper written by Anders Wandahl and deposited at arXiv will give more information about this fact: <u>http://arxiv.org/abs/0905.2912</u>

The aim of the workshops is that they should be as participatory as possible, and that hands-on experience is the key to learning and understanding.

Mathematics department Addis Ababa University, Ethiopia October 19-21, 2010



The reason for performing a workshop in Addis Ababa was primarily that the mathematics department has recently launched a PhD programme. Over 40 participants attended, a number which was much higher than expected. The computer room where the lectures and exercises took place had only about 20 computers which led to that two participants had to share one computer. This was not ideal but my impression is that everything was working very well in spite of this during the workshop.

Having performed workshops in many African and Asian countries before, I am very happy to report that this is the first time that I didn't see anyone checking their personal e-mails or Facebook accounts - all the participants were extremely ambitious and dedicated, and gave very relevant and clever remarks, suggestions and questions.

The evaluation performed after the workshop also indicates that the participants found it worthwhile to attend:



The full evaluation report with participant's comments can be found at

https://websurvey.textalk.se/en/report.php?reportID=33986&fullscreen=1

L'École de recherche CIMPA Université de Bamako, Mali November 20-21, 2010



The workshop in Bamako was performed as a part of the l'École de recherche CIMPA Théorie des Nombres et Algorithmique. The setup of this workshop differed from the Addis Ababa one, as no computer room was available at the venue of the school, and the time available was just two half days. This workshop was performed more like lectures given in English, simultaneously translated into French by Michel Waldschmidt.

Given these constraints, we tried to make the sessions as participatory as possible. The audience was encouraged to intervene and put questions at any time in order for them not to lose the track. Many of the participants also had their own laptop computers and could replicate the demonstrations given on the screen.

The Bamako workshop involved 24 mathematicians from 12 African countries. A strong point in the sessions was that the experienced researchers and teachers from France, Italy and Spain also attended, which resulted in that many practical hints and tips in the realm of information access could be given and discussed.

Alas, the evaluation performed after the workshop resulted – despite of reminders – in very few replies. The results from the participants that answered the survey are however very satisfactory:



The full evaluation report with participant's comments can be found at

https://websurvey.textalk.se/en/report.php?reportID=35001&fullscreen=1

## Conclusion

My impression is that the knowledge about online information resources in mathematics is rather low among African mathematicians. In order to be a part of the scientific community you must have a good view of what is happening at the research frontier in your field. You must also be able to find, acquire and read the research papers relevant to your research. One – and maybe the best way to raise the awareness of what is available for African researchers in terms of databases, journals and books - is to dedicate a few days exploring all the resources available. Ideally this should be done "hands-on" as training is the key to learning and understanding.

My view is that the two workshops performed in Addis Ababa and Bamako during the autumn of 2010 has proven that this approach is a good way to accomplish these goals.