

DML 2009 Opening

Petr Sojka

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July 8th, 2009

In the beginning, there was a word, and the word was MKM
pre-workshop and MKM pre-workshop was the word

From suzuki@math.kyushu-u.ac.jp Wed Nov 7 12:23:58 2007

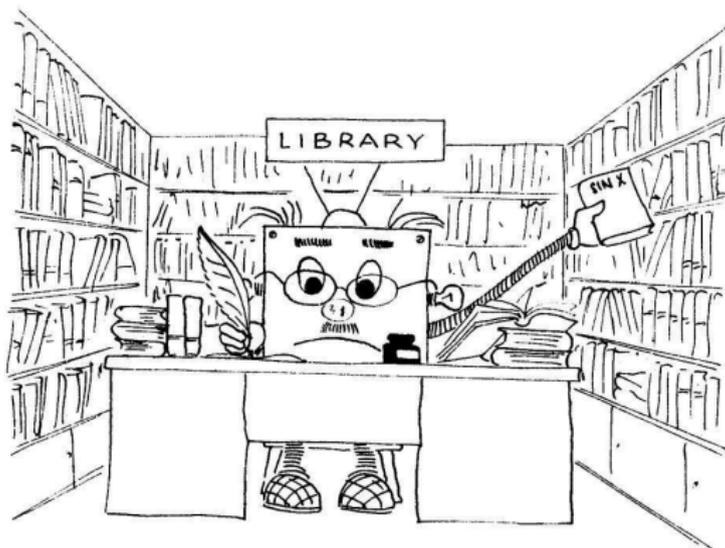
...

Would you please work for organizing a pre-workshop
(or special session in MKM) on the topic of Digital
Library of Mathematics (and Math Search)?

This Idea was strongly supported by Volker and Serge.
Since you know very well both the technical aspects
of digital libraries and also the real library
management, I would be very happy if you would accept it.

Looking forward to your reply,
Best regards, Masakazu Suzuki

Digital Library of Mathematics – the Dream



- ▶ Vision of World Digital Math Library (WDML) that will bring the enduring mathematical legacy to researchers worldwide.
- ▶ Google Scholar \parallel `peer_reviewed_math` but better! (even than MR with full texts :-)

Digital Library of Mathematics – the Dream



- ▶ High quality, checked content, crosslinked via reviewing databases Zentralblatt MATH or Mathematical Reviews (more than 2,500,000 reviewed articles).
- ▶ Estimation of 100.000.000 pages in total only (able to be cleverly stored in one portable disc (pounds 100) today).

Workshop objectives

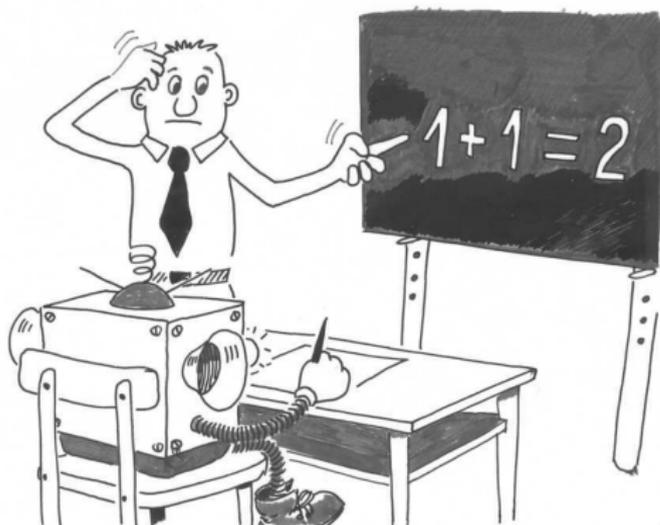
To formulate the strategy and goals of a global mathematical digital library and to summarize the current successes and failures of ongoing technologies and related projects.

- * What technologies, standards, algorithms and formats should be used and what metadata should be shared?
- * What business models are suitable for publishers of mathematical literature, authors and funders of their projects and institutions?
- * Is there a model of sustainable, interoperable, and extensible mathematical library that mathematicians can use in their everyday work?

What is new this year?

- * humbly addition of *'a'* into the workshop title
- * more time, more *space*, more non-EU contributions

Towards a Digital Mathematics Library



The Evolving Digital Mathematics Network

David Ruddy (Cornell University Library,
USA)

Plenary invited, Thursday, 15:00

Community Curation and Management of Mathematical Literature

John Burns and Nigel Kerr (Ithaka/JSTOR,
USA)

Thursday, 16:20

Report on EuDML and EVLM activities

Thierry Bouche (Université de Grenoble I &
CNRS, France)

invited, Thursday, 17:00

Towards Mathematical OCR and Search



An Approach to Similarity Search for Mathematical Expressions using MathML

Keisuke Yokoi (University of Tokyo, Japan)
and Akiko Aizawa (University of Tokyo,
National Institute of Informatics, Japan)

Wednesday, 9:00

Improving Mathematics Retrieval

Shahab Kamali and Frank Wm. Tompa
(University of Waterloo, Canada)

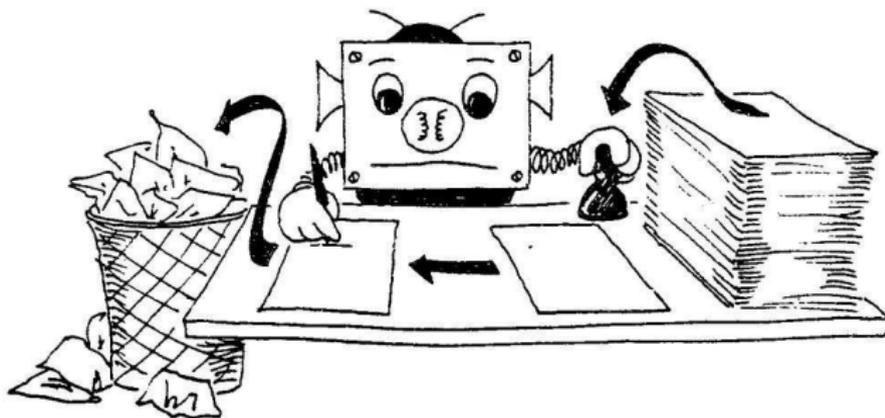
Wednesday, 9:30

An Online Repository of Mathematical Samples

Josef B. Baker, Alan P. Sexton, and Volker
Sorge (University of Birmingham, UK)

Wednesday, 10:00

Digitization Reports



Report on the Current State of the French DMLs

Thierry Bouche (Université de Grenoble I &
CNRS, France)

Wednesday, 11:00

Experimental DML over Digital Repositories in Japan

Takao Namiki, Hiraku Kuroda, and Shunsuke Naruse (Hokkaido University, Sapporo, Japan)

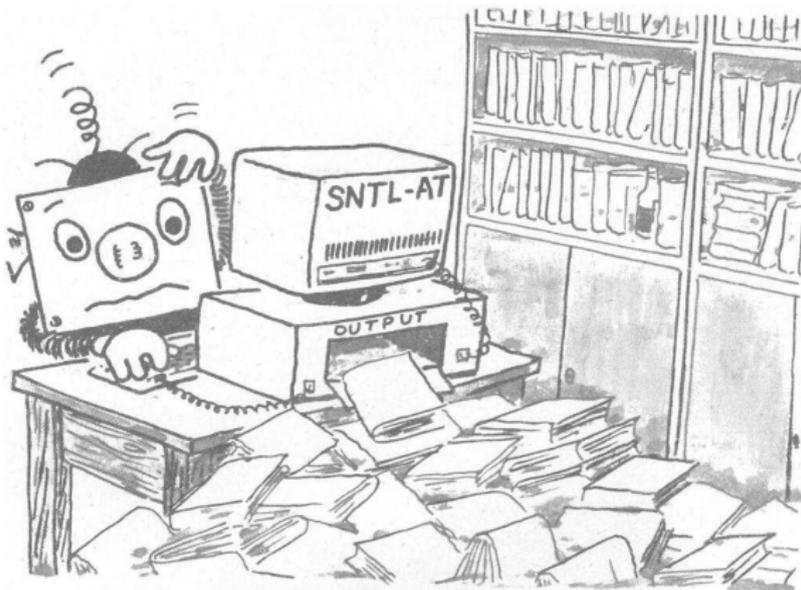
Wednesday, 11:30

Report on the Czech DML

Petr Sojka (Masaryk University, Brno, Czech Republic)

Wednesday, 17:50

Digitization Technologies and Platforms



Document Interlinking in a Digital Math Library

Claude Goutorbe (Cellule Mathdoc,
Université Joseph Fourier and Centre
National de la recherche Scientifique,
Grenoble, France)

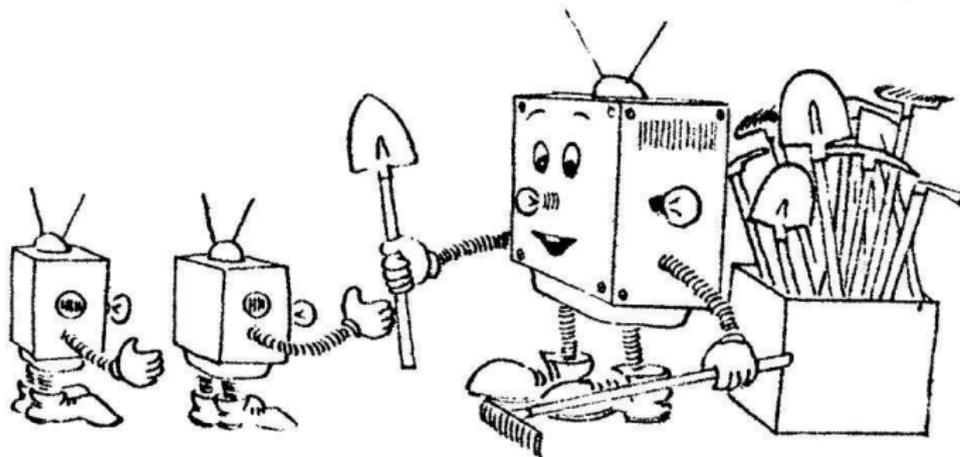
Wednesday, 16:20

I2Geo: a Web-Library of Interactive Geometry

Paul Libbrecht (DFKI GmbH, Saarbrücken, Germany), Ulrich Kortenkamp (University of Education Karlsruhe, Germany) and Christian Mercat (I3M, Université Montpellier 2, France)

Wednesday, 16:50

Tools and Techniques



MathML-aware Article Conversion from \LaTeX

Heinrich Stamerjohanns, Deyan Ginev,
Catalin David, Dimitar Misev, Vladimir
Zamdzhiev, Michael Kohlhase (Jacobs
University Bremen, Germany)

Thursday, 11:00

Conversion of \TeX Documents to PDF

Aleksandar Pejović and Žarko Mijajlović
(Mathematical Institute SANU, Belgrade,
Serbia)

Thursday, 11:30

Ongoing Efforts to Generate “Tagged PDF” using pdf_TEX

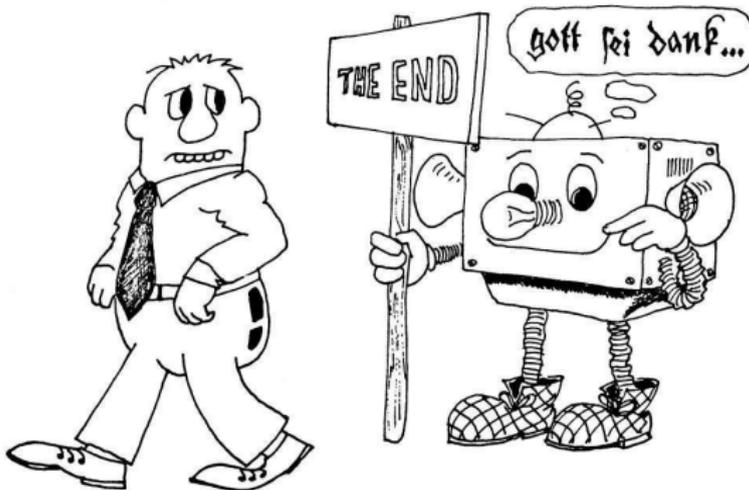
Ross Moore (Macquarie University, Sydney,
Australia)

Wednesday, 17:20

In the beginning, there was a word,...

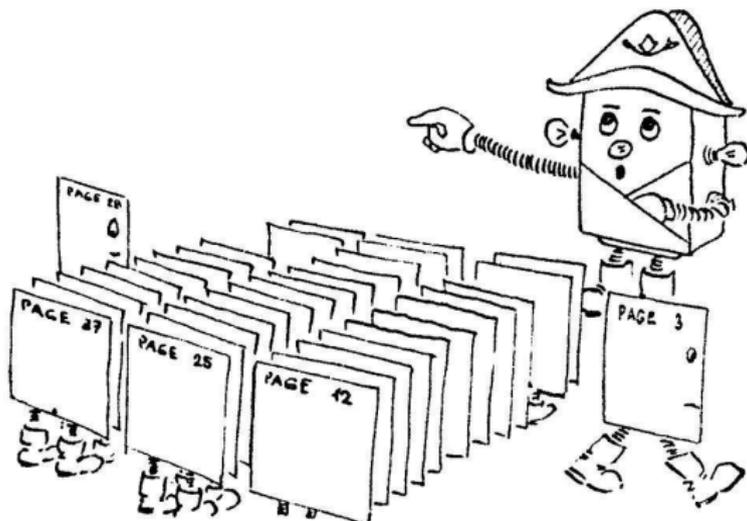
and then there was DML 2009 – Towards a Digital
Mathematics Library Workshop

Welcome and enjoy!



DML Opening ends, DML starts

by Keisuke Yokoi: An Approach to Similarity Search for Mathematical Expressions using MathML



Advert I: DML Proceedings

DML 2008 proceedings and additional copies of DML 2009 available for sale at the reception.

Advert II: UK Mathematics Content Workshop

One day workshop on mathematical content in electronic media, to take place at The Open University, Milton Keynes, UK on Wednesday 9th September.

Themes:

1. Content related technical problems in supporting e-Learning in mathematics
2. Standards related to digitisation of mathematics research literature
3. Formulas and equations in otherwise non-mathematical content

Attendance limited to 30, and there are funds for travel and accommodation (thanks to JISC and the OU for funding).

For more information, and to let us know you'd like to attend, visit:

<http://groups.google.com/group/uk-math-content-2009/web/home>