

Applied Mathematics on the Web - Needs, Initiatives and Perspectives

WOLFRAM SPERBER¹ <sperber@zib.de>

Mathematics Inside - this slogan becomes more and more valid for key technologies in industry and services.

A lot of initiatives have been started in applied mathematics, e.g., the 'MACSI-net' project on the European level as well as the BMBF mathematics program and the DFG Research Center 'Matheon' in Germany.

It is difficult, however, to find detailed information concerning real applications of mathematics on the Web, nowadays the most important information media. What information is relevant for potential users?

The information about applied mathematics should address the needs of different target groups, developers and managers in industry and services, students and scientists in academic institutions, politicians, journalists, and the public. Users, of course, want to learn about the problems, aims, modelling, methods, and the results of projects.

Math&Industry is an attempt to present the BMBF program in applied mathematics on the Web. Up to now, more than 200 projects have been funded under this program. The concept developed for the Web presentation comprises two layers:

- the presentation of the projects,
- a central portal providing special services.

Our proposal for the Web presentation of the projects contains the groups 'Overview', 'Application and Results', 'Participants', which provide a fast survey on a project. The groups 'The Problem of Practice', 'Modelling and Models', and 'Mathematical Treatment' give detailed information.

The WebSiteMaker is a tool to easily create a complete Web site.

The information given by the projects is extracted in special services, e.g., a Glossary, an Expert Database, or a Software Platform. The concept of Math&Industry is a way to build up topical services for the field of applied mathematics.

For more information see <http://www.mathematik-21.de>

¹Zuse-Institut Berlin