

Pam Division Award Citation for 2005
ERAM

The increasing amount of mathematics literature in the 19th century prompted two Berlin mathematicians, Felix Müller and Carl Ohrtmann, to establish one of the first reviewing publications in mathematics, the **Jahrbuch über die Fortschritte der Mathematik**. The *Jahrbuch* began publication in 1869, and was published by Walter de Gruyter until 1943. The **Jahrbuch** reviewed all mathematics published each year, but it soon fell behind in its publishing schedule. Nevertheless, it became an important tool for mathematical research worldwide during its time and beyond. The fat annual volumes, mostly in German, have been a highly used tool in academic mathematics collections worldwide for decades even after it ceased publication. More than 200,000 publications were reviewed in the 68 volumes of the **JFM**.

As mathematics librarians know so well, mathematics literature never goes out of date. The mathematics covered by the **Jahrbuch** will always be a valuable segment of the literature. With the rise of electronic databases such as *Zentralblatt MATH* and *MathSciNet* in the 1990's, European mathematicians began to plan to convert the **Jahrbuch** to an online database. They not only wanted to format the bibliographic data and reviews for easy online retrieval, they also wanted to enhance each record with current MSC classification, English keywords, and expert commentary where merited. In addition, plans were made to link approximately 20% of the records to scanned copies of the actual documents themselves.

Funded by the Deutsche Forschungsgemeinschaft (DFG) and based primarily at Niedersächsische Staats- und Universitätsbibliothek Göttingen (SUB Göttingen) and Technische Universität Berlin (TU Berlin), the project involved mathematicians and librarians working to enhance and validate the data. Today the *ERAM (Electronic Research Archive for Mathematics)*, also known as the *Jahrbuch Project*, has been completed and is now an integral part of the research tools of the discipline. The Physics, Astronomy and Mathematics Division of SLA wishes to recognize this great achievement by awarding the *Jahrbuch Project* our PAM Division Award for 2005.

The two mathematicians who edited the *Jahrbuch Project* are familiar names to mathematics librarians and frequent visitors to our PAM Division sessions. Prof. Dr. Bernd Wegner (TU Berlin), long-time editor-in-chief of **Zentralblatt für Mathematik und ihre Grenzgebiete**, and tireless promoter of numerous European mathematics projects which benefit us all, spearheaded the drive to create and complete this database and archive. Professor Keith Dennis (Cornell University), former editor-in-chief of **Mathematical Reviews**, and equally tireless promoter of numerous similar grand projects to preserve, protect, and communicate mathematics literature also worked to guide the creation of this database. The work itself was supervised by Prof. Dr. Wegner and Prof. Dr. Elmar Mittler (SUB Göttingen).

More than 150 mathematicians collaborated on the project as voluntary experts by providing English translation of the article titles, adding MSC2000 subject classifications

and English keywords, and providing some assessment of the value of the document in the development of mathematics. Librarians worked on the verification and standardization of journal and author names, and linking to digital versions and/or document delivery of the articles. The digitization of particular articles expanded beyond what was originally planned to digitizing entire runs of journals. Presently there are 15,638 links to fulltext images of articles and books in various digital archives. Today the entire *Jahrbuch Project* can be accessed on its own for free or as integrated into *Zentralblatt MATH*. It is mirrored by various sites around the world to provide safety and quick access to the data.

The PAM Division Award reads: “The award should be given for a significant contribution to the literature of physics, mathematics or astronomy or to honor work that demonstrably improves the exchange of information in physics, mathematics or astronomy. The contribution should also significantly benefit libraries or enhance the ability of librarians to provide service. It should be special - above and beyond the normal job requirements of the individual(s) or group concerned.”

The *ERAM* or *Jahrbuch Project* is perfectly suited for this award. Mathematics librarians and researchers around the world depend daily on this enhancement to our research tools. Dr. Wegner and Dr. Dennis, we thank you for the creation of this unique, freely accessible database and archive of mathematics literature. And we applaud you and your colleagues for your foresight, determination, and high standards. Congratulations on this award.