

The Electronic Library of Mathematics



The European Mathematical Society

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FIZ Karlsruhe / Zentralblatt MATH

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What



- ✎ Broadly based electronic distribution and archiving network for mathematics
- ✎ Provided by the European Mathematical Information Service (EMIS) under the auspices of the European Mathematical Society (EMS)
- ✎ Mirrored world wide (about 40 mirror sites)
- ✎ Established 1995

What



☞ Contents today:

☞ Journals: 50 (45+2[disc.]+3[tba])

☞ 20 also available in print

☞ about 403 volumes

☞ Proceedings/Collections: 13

☞ Articles: about 6900

☞ Monographs: 8

☞ Collected Works: 2 (Riemann, Hamilton)

☞ Unrestricted access

Why



- 👉 Not-for-profit bundling offer for academic and society publications
- 👉 Critical mass to be competitive with commercial publishers
- 👉 Wide distribution of contents
- 👉 Exploit synergies with related activities to secure free flow of scientific information

Who



- 👉 European Mathematical Society: Part of EMIS, information services network
- 👉 Scientific supervision:
EMS Committee on Electronic Publishing
- 👉 Technical administration:
Editorial office of Zentralblatt MATH
- 👉 Contents:
Academic publishers, editors, authors

How






- ✎ Distribution agreement with editors
 - ✎ no copyright transfer, free of charge
- ✎ ELibM hosted publications
- ✎ ELibM produced publications
- ✎ Long term preservation agreements:
 - ✎ SUB Göttingen
 - ✎ Cornell, Kroch Library

Quality standards (1)



Scientific standards

-  An editorial board must assure that articles accepted for publication are of good scientific quality
-  Every article must be refereed and recommended for publication by one or more experts
-  The choice of articles must involve no discrimination on the basis of politics, nationality, race, sex, or religion

Quality standards (2)



- ✎ Editorial and typographic standards
 - ✎ Articles in polished form similar to that of printed mathematical journals
 - ✎ Approximately uniform typography
 - ✎ Unique identification suitable for use in bibliographies of other articles
 - ✎ Recommended: abstract, dates of receipt of articles, dates of publication

Quality standards (3)



👉 **Timeliness:**

↳ at discretion of Editors

👉 **For journals with print version:**

↳ may be delayed a specified period so as to favour sales

(e.g: Annals of Mathematics: 5 years,
JEMS: 3 years)

Related activities



☞ Zentralblatt MATH

☞ reviewing and abstracting service in pure and applied mathematics

☞ ERAM, “Jahrbuch Fortschritte Math.” project

☞ DB and archive of historical math (1860-1943)

☞ EULER

☞ portal site to mathematical library holdings, preprints, reviews, qc internet resources, publishers, ...

Metadata standards



- 👉 Journal-volume-issue-article based navigation structure
- 👉 Complete, standardised metadata not generally available
- 👉 Lack of stable standards
- 👉 Reduced load on editors and providers
- 👉 Contents first

Outlook



- ✎ New publication types
 - ✎ Electronic Geometry Models
 - ✎ Library of project results
(e.g. tools, software for solving flow problems in industry)
- ✎ Reference desk for scanned historical works
 - ✎ DIEPER, Cornell Math Books, ERAM, etc.
- ✎ Paid subscription based offerings

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