The Electronic Library of Mathematics

The European Mathematical Society

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The Electronic Library of Mathematics

What

The European Mathematical Society

- 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

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What

The European Mathematical Society

- 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

The European Mathematical Society

- 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

The European Mathematical Society

- 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

The European Mathematical Society

- 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

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- 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, ...

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Metadata standards

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- 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

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- 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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