

ELECTRONIC RESOURCES FOR MATHEMATICS AT BYU

T.JARVIS. MARCH 2006

1. FINDING ABOUT ARTICLES

1.1. arXiv.org.

- Search at <http://arXiv.org/find/math> or <http://front.math.davis.edu>
- Also use CiteBase (follow the links from the abstract of an article on arXiv)

1.2. **Google.** Sometimes plain Google is better, and sometimes Google Scholar is better.

1.3. **BYU paid databases.** These are usually best accessed directly—**not** through the library's search engine.

- MathSciNet
 - On campus: www.ams.org/mathscinet/search
 - Off Campus: follow links from HBLL math resources or go directly to Here
- Web O' Science (Science Citation Index):
 - On Campus: isiknowledge.com
 - Off Campus: follow links from HBLL math resources or go directly to Here

1.4. Other databases.

- Zentralblatt für Mathematik
- Subject specific databases:
 - SLAC SPIRES High Energy Physics

2. ACCESSING ELECTRONIC ARTICLES (FULL TEXT)

2.1. Instantly available, searchable text.

- arXiv.org
- Authors' personal web pages
- BYU electronic journals (search under "find books" for the journal title and follow the links)
- Other collections:
 - JStor.org
 - EMANI: Electronic Mathematical Archiving Network Initiative
 - Numdam: Digitized versions of many older French journals and other sources.
 - Göttingener Digitalisierungszentrum: Digitized versions of many older German journals and monographs, including classics like Gauss' *Disquisitiones arithmeticae*

2.2. **Scanned.** These are not searchable and are much larger files than the others, but they are still better than paper in many cases.

- BYU FDDS (via ILL) available at <https://illiad.lib.byu.edu/illiad/>. The turnaround time is usually 1 day for articles in the HBLL, and about 3 days for inter-library loan. **WARNING:** For chapters in books and such, be sure to specify that you want it *delivered electronically*.
- KEK preprint service. These articles are instantly available, but scanned. Mostly high energy physics, and mostly older preprints.

3. DISSEMINATING YOUR RESEARCH

- arXiv.org
- Personal web page:

*The International Mathematical Union strongly encourages **all mathematicians** to put copies of **all papers** on a personal webpage, including scans of older papers when source code is not available.*

4. KEEPING UP TO DATE

4.1. Notification Services.

- arXiv.org daily subject mailings.
- Subscribe to notification service for top journals

4.2. Subject specific blogs and newsletters.

- This Week's Finds in Mathematical Physics
- Number Theory Web

4.3. Watch, listen to, or read talks online. Many places have streaming video or sound files to let you watch/hear talks that you couldn't visit in person.

- MSRI
- KITP
- ICTP (lecture notes only).

4.4. Other ways to stay up to date:

- Peruse TOC of major journals
- Attend conferences and workshops

5. OTHER TOOLS:

- Online Encyclopedia of Integer Sequences
- Wikipedia, Planet Math, and MathWorld

AN HTML VERSION OF THIS DOCUMENT CAN BE FOUND AT [HTTP://MATH.BYU.EDU/~JARVIS/ELECTRONICRESOURCES.HTML](http://math.byu.edu/~jarvis/ElectronicResources.html)