## Scientific Journals — Extinction or Explosion?

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## Abstract

The field of scientific publishing is undergoing wrenching changes. Authors of scientific articles have routinely made their papers available via ftp prior to publication (although this could be construed as a copyright violation in some cases!). With the advent of the WEB and browsers such as Mosaic, this mode of distribution threatens to supplant paper-based journals entirely. A question that has major repercussions for most of us is: "Will scientific journals disappear, or will there be a rapid explosion in the number of new journals over the next five years?"

The increasing emphasis on digital storage and distribution of information affects much more than just scientific journals, of course. In this panel, however, we will focus the discussion by concentrating on this issue. What will happen to the process of peer reviewing? What will be the dominant mode of distribution (electronic or paper)? What are the consequences for publishers, libraries, authors, readers, reviewers, and people looking to find relevant articles? If journals are to survive, how can publishing be made profitable? That is, how can we devise accounting mechanisms to charge for the effort that goes into producing the collection of articles that is available at a (journal's) URL? (There are issues such as copyright as well, but the panel should not discuss these.)

Proceedings of the 21th VLDB Conference Zurich, Switzerland, 1995 Given the volume of this data — note that with electronic distribution, people can include data sets, code, simulations, video tapes of experiments! — data management (and intelligent searching) is clearly a fundamental problem. What are the issues that the database community should address to support scientific publication and information retrieval in this environment?

The panel includes members of the database and publishing communities with an interest in digital libraries and electronic journals.

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