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Electronic Publishing and Intelligent Information Retrieval

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Europeans are now taking steps to homogenize policies and standardize procedures in electronic publishing (EP) in astronomy and space sciences. This arose from an open meeting organized in October 1991 at Strasbourg Observatory (France) and another business meeting held late March 1992 with the major publishers and journal editors in astronomy and space sciences.

The ultimate aim of EP might be considered as the so-called 'intelligent information retrieval' (IIR) or better named 'advanced information retrieval' (AIR), taking advantage of the fact that the material to be published appears at some stage in a machine-readable form.

It is obvious that the combination of desktop and electronic publishing with networking and new structuring of knowledge bases will profoundly reshape not only our ways of publishing, but also our procedures of communicating and retrieving information.

It should be noted that a world-wide survey among astronomers and space scientists carried out before the October 1991 colloquium on the various packages and machines used, indicated that TEX-related packages were already in majoritarian use in our community.

It has also been stressed at each meeting that the European developments should be carried out in collaboration with what is done in the US (STELAR project, for instance). American scientists and journal editors were actually attending both meetings mentioned above.

The paper will offer a review of the status of electronic publishing in astronomy and its possible contribution to advanced information retrieval in this field. It will report on recent meetings such as the 'Astronomy from Large Databases II (ALD-II)' conference dealing with the latest developments in networking, in data, information, and knowledge bases, as well as in the related methodologies.