Digitization of ICRC proceedings and WWW access using the NASA Astrophysics Data System

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Since 1947, the International Cosmic Ray Conference has been held biennially with proceedings published. No repository library in the world holds a complete set of these proceedings. The digitization of this series and its availability over the worldwide web would be of great benefit to the cosmic ray community. The University of Sheffield has a collection of 84% of the proceedings between 1959 and 1997 which are being donated to the NASA Astrophysics Data System for digitization prior to being made available online. The current status of this project will be presented and an appeal for missing volumes will be made.

1. Introduction

Since 1947, the International Cosmic Ray Conference has been held biennially under the auspices of the International Union of Pure and Applied Physics (IUPAP). The proceedings have been published variously, normally by a publisher in the host nation of any particular year but sometimes as a special edition of a journal. These proceedings contain a vast number of scientific papers on the subject, many of which contain findings and data which have never been presented elsewhere. Further, these proceedings represent the history of the cosmic ray and particle astrophysics communities.

On the evidence of Online Public Access Catalogues (OPACs) of the world's major science libraries, no repository library in the world holds a complete set. The collections of the CERN library and that of the British Library are the best two, but in both cases many volumes are missing.

To provide global access to this literature would be of great benefit to the cosmic ray community as well as to the related disciplines. This can be achieved by digitizing the entire series and making them available over the World Wide Web. The Astrophysics Data System (ADS) is a NASA-funded project which maintains bibliographic databases covering Astronomy, Astrophysics, Instrumentation, Physics and Geophysics.

ADS has offered to digitize the ICRC proceedings and host them on its server. These would greatly complement the existing proceedings and journals on the ADS server. The University of Sheffield has a collection of 84% of the proceedings between 1959 and 1997 which are being donated to ADS for digitization prior to being made available online.

2. Progress

The ADS is currently in the process of scanning the ICRC conference proceedings series and making them freely available on-line. For this to proceed, permission is needed from the copyright holder of each conference proceedings to scan the volumes and put them on-line. The scanning procedure is essentially destructive to the volumes in that the bindings must be removed. Paper copies of the proceedings volumes are required that will not be returned after scanning.

The following table shows the status of this effort as of 4th July 2005.

Year	Place	©	Paper copy	Paper copy	Online
			at ADS	at Sheffield	
2003	Tsukuba, Japan	2	electronic		yes
2001	Hamburg, Germany	2	electronic		yes
1999	Salt Lake City, USA	2	electronic		yes
1997	Durban, South Africa	2	no	yes	no
1995	Rome, Italy	5	no	no	no
1993	Calgary, Canada	5	no	yes	no
1991	Dublin, Ireland	1	yes		no
1990	Adelaide, Australia	5	yes		no
1987	Moscow, U.S.S.R	5	yes		no
1985	La Jolla, USA	4	yes		no
1983	Bangalore, India	5	yes		no
1981	Paris, France	5	no	yes	no
1979	Kyoto, Japan	5	no	yes	no
1977	Plovdiv, Bulgaria	5	no	yes	no
1975	Muenchen, Germany	5	yes		no
1973	Denver, CO, USA	5	yes		no
1971	Hobart, Australia	5	yes		no
1969	Budapest, Hungary	5	no	yes	no
1967	Calgary, Canada	5	no	yes	no
1965	London, UK	5	no	yes	no
1963	Jaipur, India	5	no	yes	no
1961	Kyoto, Japan	5	no	yes	no
1959	Moscow, U.S.S.R	5	no	yes	no
1957	Veranna, Italy	5	no	no	no
1955	Guanjuato, Mexico	5	no	no	no
1953	Bagneres, France	5	no	no	no
1949	Como, Italy	5	no	no	no
1947	Cracow, Poland	5	no	no	no

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- 1 Written copyright notice in hand
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The proceedings which are marked as having paper copies at Sheffield are awaiting shipment to ADS. Those for which no paper copies are marked either at Sheffield or ADS are eagerly sought.

At present, the table only indicates complete years, and it is possible that individual sections within years are missing. The current version of the table is available at: http://ads.harvard.edu/pubs/icrc_status.html, and information about donating the remaining volumes can be found there.

3. Access

It is hoped that the entire proceedings of the ICRC can be provided online by ADS within the next year. They can be accessed at: http://adsabs.harvard.edu/Proceedings/proceedings/ICRC. Specific volumes can be obtained by specifying the year and the volume in that year.

4. Acknowledgements

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