

Recent developments in Open Access in High Energy Physics

A central circular image showing a complex, multi-colored (purple, blue, red, orange) particle detector visualization, likely a calorimeter or tracking detector, with many lines radiating from a central point, set against a green background with geometric shapes.

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CERN - March 14th 2007

A quick retrospective look

- Free access (prior to the electronic era)
 - The CERN Convention (1953) contains what is effectively an early Open Access manifesto:
“... the results of its experimental and theoretical work shall be published or otherwise made generally available.”
 - All HEP labs ensured vast free distribution of preprints and reprints for 40 years
- Free electronic access to preprints
 - The launch of arXiv (1991)
- Free peer-reviewed electronic journals
 - JHEP (1997) followed by PRSTAB and NJP (1998)

The first steps towards OA taken by the established publishers

- Launch of the hybrid model
 - Springer proposed “*Open Choice*” in 2004
 - Since then most publishers have launched hybrid models
- A tool for the transition to full Open Access?
 - Low take-up due to lack of paying mechanisms
 - Paying twice?
 - Subscription fees are already considered too high
 - OA charges on top of these ???
- Though a confirmed interest for OA
 - ... provided that the barriers for authors are removed
 - ... provided that total cost is brought under control

More recent history of OA in HEP

Task force of funding agencies, publishers, author communities charged to “*study and develop sustainable business models for OA publishing for existing and new journals and publishers in particle physics*”



Report in June 2006:

- Focus on sponsoring to overcome hurdles of publication charges
- Focus on “particle physics only” journals
- Focus on several existing, established, high-profile journals (leaving room for new players)
- Sponsoring through a consortium as the most viable model



Establishing a sponsoring consortium for Open Access publishing in particle physics

03 November 2006

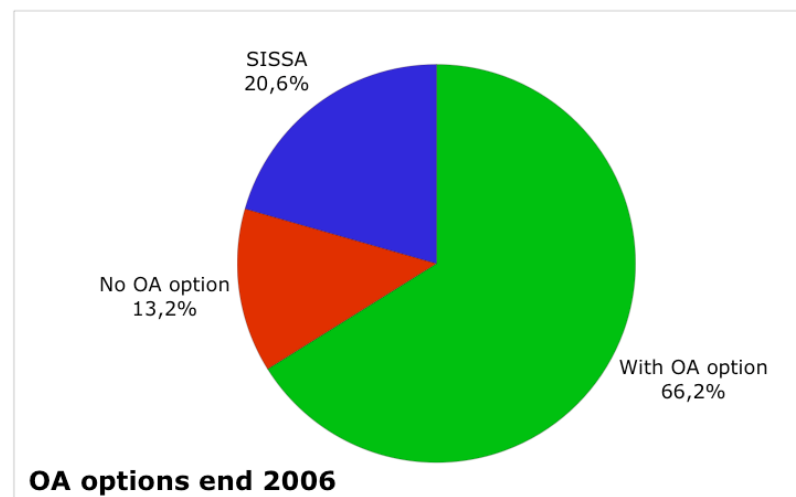
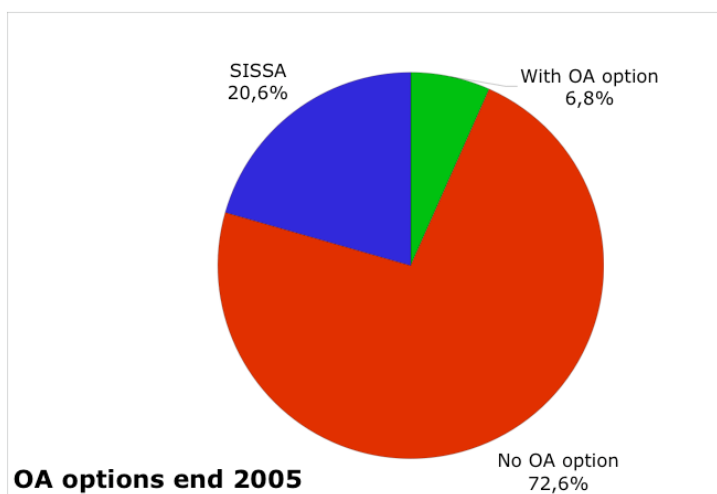
CERN

November 3rd 2006: *Meeting of European funding agencies, library consortia and the research community*

<http://indico.cern.ch/conferenceDisplay.py?confId=7168>

- Publishers align their Open Access options as a consequence of the discussion on Open Access in the HEP community.
- Peer-review system is an essential element to preserve in the transition to Open Access.
- Move to full Open Access, rather than the hybrid variety currently proposed by several publishers.
- **Establish a consortium for the transition to Open Access publishing in particle physics.**
- **A working party is charged to design a blueprint for the strategy and operation of the consortium.**

Expansion of OA offers changes from 2005 to 2006



Published papers by journal OA policy

- Statistics based upon 5015 papers submitted to hep-ex, hep-ph, hep-lat and hep-th in 2005, and published subsequently in refereed journals

Any news from the publishers?

The image shows two screenshots of journal websites. The top one is for the Journal of High Energy Physics (JHEP), with a navigation menu including 'About JHEP', 'for Readers', 'for Authors', 'for Referees', 'for Editors', and 'Flowchart of a preprint'. The bottom one is for the Journal of Instrumentation (JINST), with a similar navigation menu. Below the JINST screenshot, the text reads: 'ISSN 1748-0221', 'for assistance: E-mail the Editorial Office', 'A journal by scientists for scientists', and the URL 'http://st.sissa.it/jhep/docs/SISSA_IOP_OA_proposal.pdf'.

JHEP and JINST offer from 2007 a new hybrid model
institutional membership fee

The author barriers are removed, the subscription package is broken and the institutions pay only once

All articles with at least one author from a member institution will be published Open Access

CERN, DESY and a growing list of labs have accepted

From the press

- [Particle Physicists Want to Expand Open Access](#)
“Particle physicists have come up with a novel way to promote free, immediate access to journal articles.” **Science, 1st September 2006**
- [Coalition Works to Secure Open Access to Published Research](#)
“That kind of coalition could be duplicated in other fields that don't have their own CERN.”
Chronicle of Higher Education, 22nd September 2006

Strong support statements from the experiments

*"We, the **XXX** Collaboration, strongly encourage the usage of electronic publishing methods for **XXX** publications and support the principles of Open Access Publishing, which includes granting free access of our **XXX** publications to all. Furthermore, we encourage all **XXX** members to publish papers in easily accessible journals, following the principles of the Open Access Paradigm."*

ATLAS; approved on 23rd February 2007

CMS; approved on 2nd March 2007

ALICE; approved on 9th March 2007,

LHCb; discussion in progress

Conclusions

- The scientists are on board
- The publishers do align to a new paradigm
- The funding agencies are very interested

A quick move towards Open Access publishing is becoming a world wide HEP priority

The LHC start-up in 2007 is a unique opportunity for particle physics