

Open Access Publishing in Particle Physics

A central circular image showing a complex particle physics event visualization, likely a detector reconstruction. It features a dense, multi-colored (purple, blue, red, orange) starburst pattern of tracks radiating from a central point, set against a light green background. The overall slide background is a dark green gradient with abstract geometric shapes and a faint 'OA' logo in the bottom right.

R. Voss | Jahresversammlung Bad Honnef, 18. November 2006

History

- Successful “Colloquium on Open Access Publishing in Particle Physics” held at CERN on 7-8 December 2005 (www.cern.ch/open-access)
- Set up Task Force to “study and develop sustainable business models for OA publishing for existing and new journals and publishers in particle physics, focused mainly on a sponsoring model”
- Report published in June

Membership

Tripartite group: authors, publishers funding agencies:

- Members:
 - Daniele Amati (SISSA)
 - Martin Blume (APS)
 - Enzo De Sanctis (INFN)
 - Gregor Herten (IUPAP C11)
 - Leif Jonsson (Lund)
 - François Le Diberder (IN2P3)
 - Claus Montonen (EPS)
 - Jan Velterop (Springer)
 - Rüdiger Voss (CERN/Chair)
- Expert:
 - Frederick Friend (JISC)
- Observer:
 - Yves Dumont (EU)
- Secretariat:
 - Jens Vigen
 - Joanne Yeomans
 - Anne Gentil-Beccot
 - Tullio Basaglia
 - (all CERN Library)

The Task Force vision of OA

- The long-term goals:
 - Access on the Internet for all readers at any time and with no restrictions
 - Access for authors with no financial barriers
 - Authors retain copyright
 - Affordable for the community
- This cannot be achieved overnight: transition period and transition scenario needed

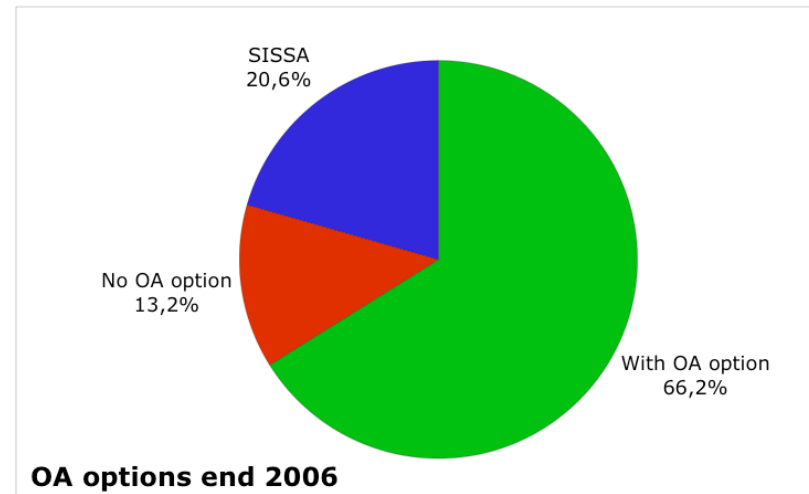
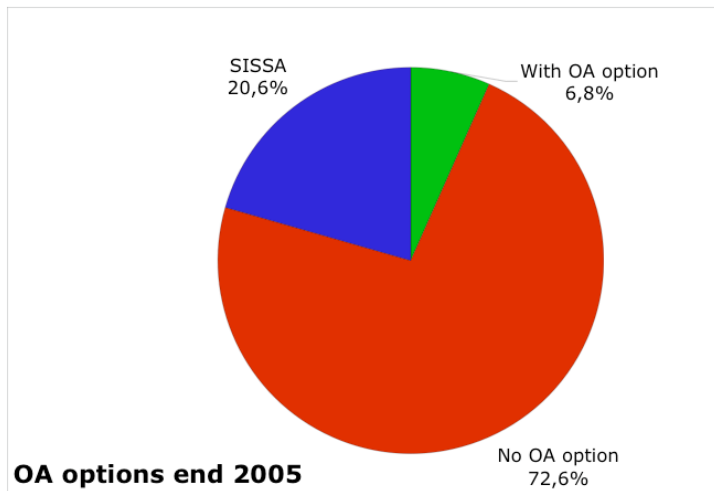
Key working hypotheses

- Focus on sponsoring to overcome practical & psychological hurdles of (traditional) publication charges
- Focus on “particle physics only” journals
- Focus on existing, established, high-profile journals to make model attractive to authors
 - ... but leave room for new players!
- Support > 1 , better 3, 4 or more journals:
 - Give authors a choice
 - Stimulate competition
 - Maintain high peer review and editorial standards
- “The first non-religious approach to OA” (M. Blume/APS)

OA policies of key HEP journals

- SISSA (JHEP, JCAP, JINST): ready to convert to full OA under sponsoring model
- APS: recently launched “Free to read” scheme for all titles; PRSTAB
- Springer for Eur. Phys. J. C; operates “Open choice” scheme since 2004 (just announced drastic price reduction!)
- Elsevier launched “Sponsored articles” for particle physics journals this year
- ... plus some more
- Candidates for new journals (PhysMath Central, Atlantis?)

OA offers: from 2005 to 2006



- Distribution of 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

Initial conclusions

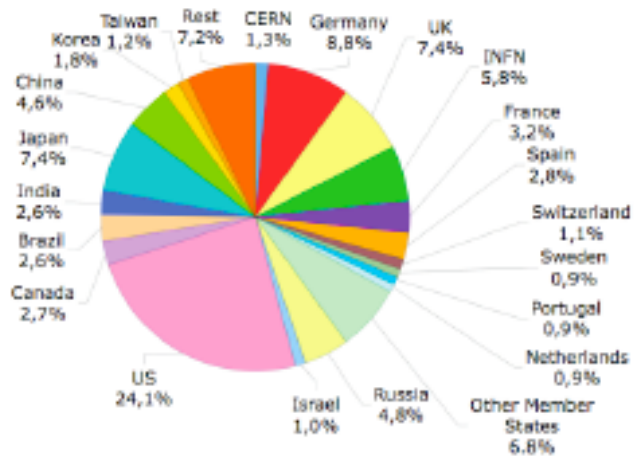
- With one exception, all key publishers/journals in particle physics offer OA options at the end of 2006
- Sponsoring all “OA ready” journals would cost 5 – 6 M€/year
- Compare to traditional journal subscriptions integrated over particle physics institutes!
 - Example – NIM A+B: 16'000 €/year x 300 LHC institutes = 4.8 M €/year!

SCOAP³

- The task force considers sponsoring through a consortium the most promising and sustainable business model for particle physics
- Propose a “Sponsoring Consortium for Open Access Publishing in Particle Physics” (SCOAP³)
- Potential partners:
 - Funding agencies supporting particle physics
 - Funding for experimental papers could be channeled through major laboratories (CERN, DESY, LNF Frascati, Fermilab, SLAC, KEK, IHEP Beijing, ...) or collaborations
 - Non-HEP funding agencies providing generic support to OA
 - Libraries

Origin of HEP research articles

Distribution of HEP articles

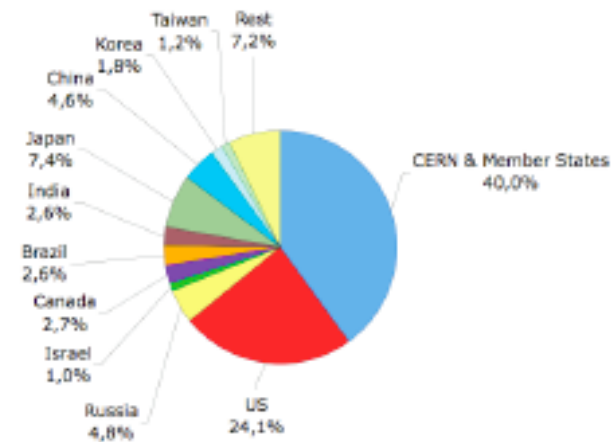


Co-authorship is taken into account assigning articles to countries/institutes on a *pro-rata* basis

Salvatore Mele - SCOAP³ Meeting - CERN 3/11/2006

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Distribution of HEP articles



Salvatore Mele - SCOAP³ Meeting - CERN 3/11/2006

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Goals

- All relevant journals in the field convert to OA – or disappear: “publish OA or perish”
- Provide room for new journals
- Co-fund “large bandwidth” journals
- SCOAP³ is supported by particle physics funding agencies based on a “fair share” principle
- Include non-European funding agencies

Summary

- A significant fraction of key particle physics journals is ready for a rapid transition to Open Access under a consortium-funded sponsoring model
- These journals now cover close to 90% of the original research articles
- We have identified initial budget requirements
- This is a first step: we need to raise the funds, and to agree on a scheme for governance and administration of the consortium
- The LHC start in 2007 is a unique opportunity to reform the publishing model of particle physics forever

Meeting with funding agencies

- CERN organized meeting with European funding agencies on November 3
- Most funding agencies well represented
- Strong support for SCOAP³ proposal!
- “Interim administration” being set up with participation of funding agencies:
 - Establish formal/legal basis for Funding Agencies to join
 - Establish commercial procedures to negotiate with interested publishers
- Goal: have consortium operational on January 1, 2008

Kommentare zur Situation in DE

- Ausgaben von DE/CH/AT für HEP-Zeitschriften derzeit 2.8 M€/Jahr (Kämpfer/GASCO)
 - Deutscher Anteil ca. 2 M€
 - Enthält NICHT Ausgaben von MPG, Helmholtz, usw.
 - Deutsche Ausgaben insgesamt 2-3 M€/Jahr
- Vergleiche mit deutschem Anteil an SCOAP³:
 $9\% \times 6 \text{ M€} = \text{ca. } 600 \text{ k€}$
- Erhebliches Einsparpotential!

Finanzierungspartner in DE

- DESY: hat Unterstützung angekündigt
- MPG: hat Unterstützung angekündigt
 - Proaktive OA-Politik (Berliner Erklärung, OA-Budget für NJP)
- DFG: hat schriftlich Interesse bekundet
 - Proaktive OA-Politik – in Vergabebedingungen für Exzellencluster eingeflossen!
 - 80-90% aller HEP-Veröffentlichungen sind Theorie! ==> DFG potentiell wichtigster Partner!!!
- BMBF???
- Alternative: (Teil)Finanzierung des deutschen Beitrags durch Uni-Bibliothekskonsortien?