Open Access and Libraries: the SCOAP³ Project & its Benefits for Scientific Communication

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scoap3.org
High-Energy Physics (or Particle Physics)

Job description for 20’000-30’000 scientists: “What is the world made of?” & “What holds it together?”

HEP aims to understand how our Universe works:
– discover the constituents of matter and energy
– understand their interactions
– unveil the ultimate texture of space and time

Experimental HEP builds the largest scientific instruments ever to reach energy densities close to the Big Bang (Half of the community, 20% of literature)

Theoretical HEP predicts and interprets the observed phenomena (Half of the community, 80% of literature)
Everything is Open Access, but it is not enough... We need peer review!
A strong request from the scientists

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

4 experimental groups
7000 scientists
from 54 countries

ATLAS; approved on 23rd February 2007
CMS; approved on 2nd March 2007
ALICE; approved on 9th March 2007
LHCb; approved on 12th March 2007
HEP and Open Access

After preprints, arXiv and the web, high-quality Open Access journals are the natural evolution of HEP scholarly communication.
Going beyond current experiments

The SCOAP³ model

Sponsoring Consortium for Open Access Publishing in Particle Physics

http://scoap3.org/files/Scoap3ExecutiveSummary.pdf
The SCOPA$^3$ Model

A consortium sponsors HEP publications and makes them Open Access by re-directing subscription money.

Today: (funding bodies through) libraries purchase journal subscriptions to (indirectly) support the peer-review service and to allow their users to read articles.

Tomorrow: funding bodies and libraries contribute to the SCOPA$^3$ consortium, which pays centrally for the organization of the peer-review service, through a call for tender. Articles are free to read for everyone.

5000-7000 HEP articles/year
80% of articles published in 6 leading journals by 4 publishers

SCOAP$^3$ is not limited to any set of journals but open to all high-quality HEP journals!
Novelties of the SCOAP³ model

- A sustainable alternative to the subscription model meeting the expectations of researchers, funding agencies, libraries and publishers.
- Link, through its call for tender, price and quality. Correlate through its contracts volume and price. This is not the case in the subscription model.
- Eliminate author-pays fees, in competition with research funds which appear as a barrier for Open Access in HEP. There is no such competition in the SCOAP³ model based on re-direction of subscriptions.
- Experiment for journal-administered peer-review services against a unique background of complete self-archiving of research articles.
SCOAP$^3$ financing

SCOAP$^3$ to be funded through a “fair-share” model based on the fraction of HEP articles per country: the more a country uses the system the larger its share. Figures are very stable over time.

The model is viable only if every country is on board! Success through consensus and unanimity, not majority. Not a weakness: a strength!

Make a 10% allowance for countries without a scientific or library infrastructure who at the beginning might not contribute to the scheme.

Allowing only SCOAP$^3$ partners to publish Open Access would replicate the subscription scheme and not solve the problems.
SCOAP$^3$ funding mechanisms

- Funding partners identify country-by-country schemes to redirect journal subscriptions to SCOAP$^3$
- Countries **pledge** their contribution to SCOAP$^3$
  - Countries with **centralised** structures for licensing join through their **national consortium**
  - Countries where subscriptions are paid by HEP **funding agencies** join through these agencies
  - In the decentralised U.S. scenario **single** institutional and **consortial** partners join SCOAP$^3$ **directly**
- Pledges **conditional** to contractual conditions with publishers in line with the SCOAP$^3$ objectives (unbundling, Open Access, author rights...)
- Broad **worldwide consensus**, signified by the pledges, indispensable before the next phase can commence
Status of the SCOAP³ fund-raising

62% of funds have been or are about to be pledged, commitment to re-direct subscriptions to HEP journals mostly by library consortia acting on behalf of whole countries.

Discussions and negotiations in progress with all countries not yet in the list, in Europe, Asia and the Americas.

Austria | Italy
Belgium | Netherlands
Canada | Norway
CERN | Romania
Denmark | Slovakia
France | Spain
Germany | Sweden
Greece | Switzerland
Hungary | JISC (UK)
Australia | Israel, Turkey
>100 US partners
- consortia (NERL, CDL, GWLA, OhioLink...)
- laboratories
- individual libraries
Status of the SCOAP$^3$ fund-raising

69.1% of funds have been or are about to be pledged, commitment to re-direct subscriptions to HEP journals mostly by library consortia acting on behalf of whole countries.

**Discussions and negotiations in progress with all countries not yet in the list, in Europe, Asia and the Americas.**

- Austria
- Belgium
- Canada
- CERN
- Denmark
- France
- Germany
- Greece
- Hungary
- Italy
- Netherlands
- Norway
- Romania
- Slovakia
- Spain
- Sweden
- Switzerland
- JISC (UK)
- Austria
- Canada
- CERN
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- >100 US partners
  - consortia (NERL, CDL, GWLA, OhioLink...)
  - laboratories
  - individual libraries

**Status 13/04/2010**
**SCOAP³ timeline**

- Funding partners identify country-by-country schemes to re-direct journal subscriptions to SCOAP³ and pledge their contribution to SCOAP³.
- Once a sizeable fraction of budget is pledged, reflecting the worldwide character of HEP and SCOAP³:
  - SCOAP³ will be formally established, with international governance.
  - SCOAP³ can issue a tender to publishers.
- Publishers answer the tender.
- SCOAP³ international governing board adjudicates contracts, taking into account journal quality and prices.
- Contracts with publisher are signed and funds are transferred to SCOAP³ which then pays publishers.
- Aim to 3-year tendering cycle, with funding commitments in sliding windows.
Additional resources:

Report of the SCOAP3 Working Party

http://arxiv.org/abs/0805.2739

R. Aymar, *Scholarly communication in High-Energy Physics*
http://cdsweb.cern.ch/record/1115073

A. Gentil-Beccot et al. *Information Resources in High-Energy Physics: Surveying the Present Landscape and Charting the Future Course*
http://arxiv.org/abs/0804.2701