



# Open Access and Libraries: the SCOAP<sup>3</sup> Project & its Benefits for Scientific Communication

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[scoap3.org](http://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!



arXiv.org e-Print archive

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11 Nov 2004: New [CoRR interface](#) introduced for our cs users.  
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## Formation and Solitons

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# 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 SCOAP<sup>3</sup> model

Sponsoring Consortium for Open Access Publishing  
in Particle Physics

scoap3.org

<http://scoap3.org/files/Scoap3ExecutiveSummary.pdf>

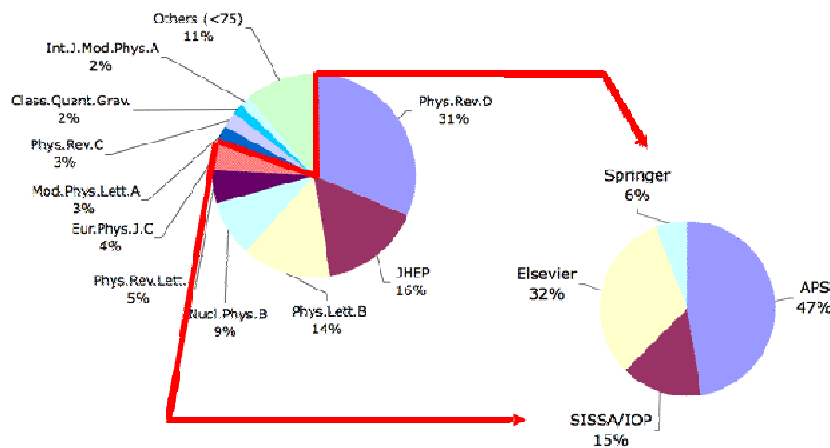
<http://scoap3.org/files/Scoap3WPReport.pdf>

# The SCOAP<sup>3</sup> 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 SCOAP<sup>3</sup> 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<sup>3</sup> is not limited to any set of journals but open to all high-quality HEP journals!

# Novelties of the SCOAP<sup>3</sup> 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 SCOAP<sup>3</sup> 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<sup>3</sup> financing

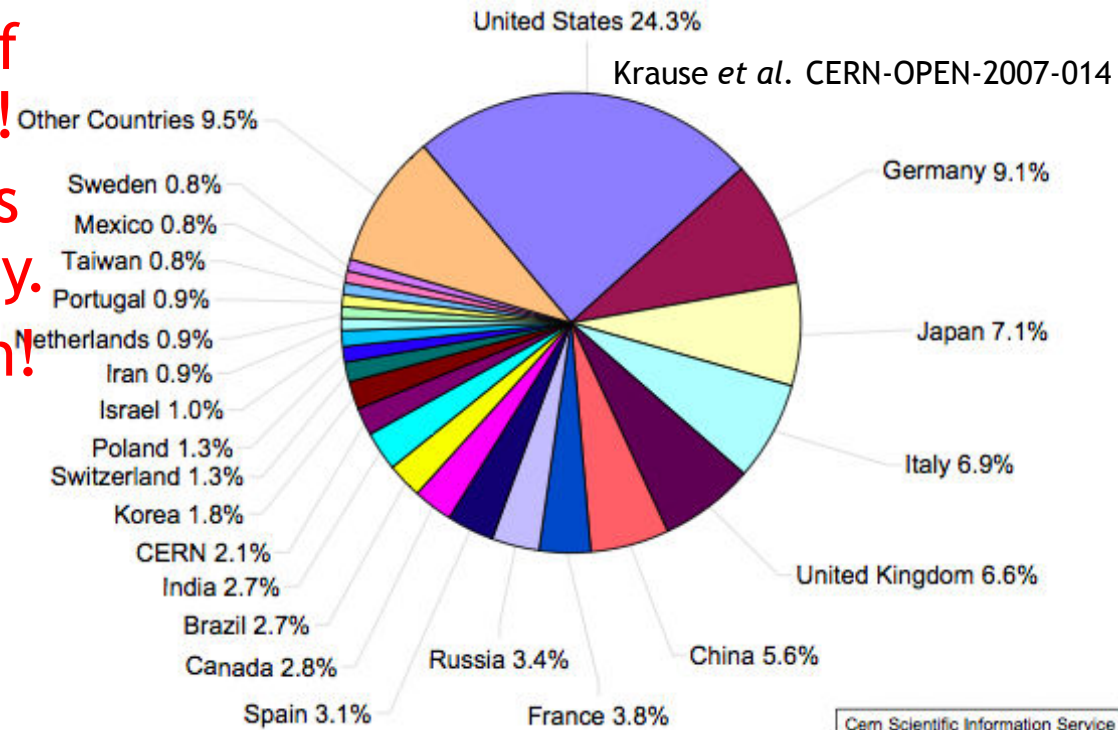
SCOAP<sup>3</sup> to be funded through a “fair-share” model based on the fraction of HEP articles per country: the more a country uses the system the larger its share. Figures are very stable over time.

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<sup>3</sup> partners to publish Open Access would replicate the subscription scheme and not solve the problems.



# SCOAP<sup>3</sup> funding mechanisms

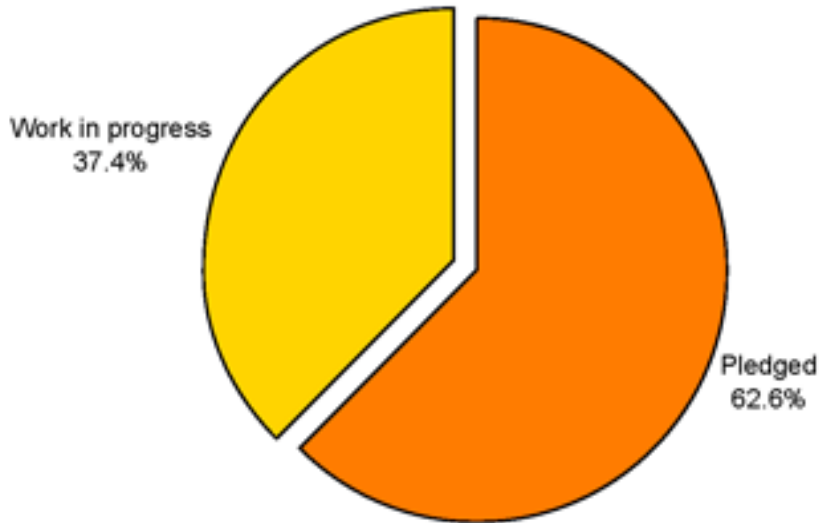
- Funding partners identify country-by-country schemes to **re-direct** journal subscriptions to SCOAP<sup>3</sup>
- Countries **pledge** their contribution to SCOAP<sup>3</sup>
  - Countries with centralised structures for licensing join through their national consortium
  - Countries where subscriptions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

# Status of the SCOAP<sup>3</sup> 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



Status 19/05/2009

|         |             |
|---------|-------------|
| Austria | Italy       |
| Belgium | Netherlands |
| Canada  | Norway      |
| CERN    | Romania     |
| Denmark | Slovakia    |
| France  | Spain       |
| Germany | Sweden      |
| Greece  | Switzerland |
| Hungary | JISC (UK)   |

|           |                |
|-----------|----------------|
| Australia | Israel, Turkey |
|-----------|----------------|

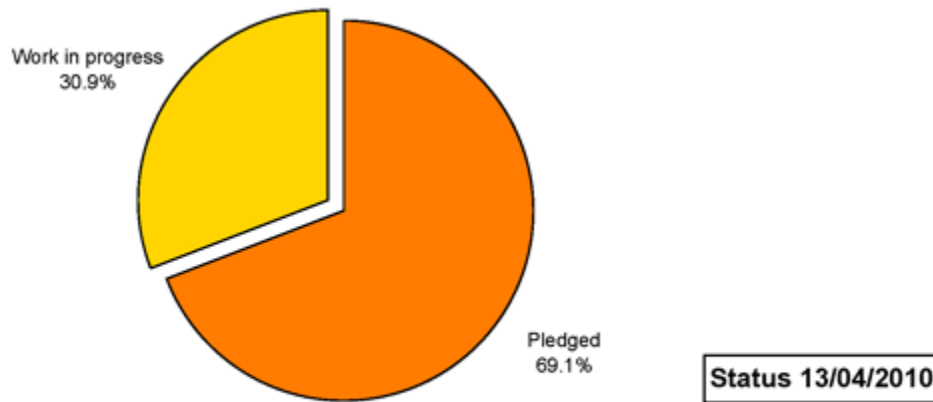
> 100 US partners

- consortia (NERL, CDL, GWLA, OhioLink...)
- laboratories
- individual libraries

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

# Status of the SCOAP<sup>3</sup> 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



|         |             |
|---------|-------------|
| 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

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

# SCOAP<sup>3</sup> timeline

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

scoap3.org

## Additional resources:

Report of the SCOAP3 Working Party  
<http://scoap3.org/files/Scoap3WPReport.pdf>

R. Heuer *et al.* *Innovation in Scholarly Communication: Vision and Projects from High-Energy Physics*  
<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>