

SCOAP³

- Background
- The SCOAP³ model
- Fund-raising status
- Next steps

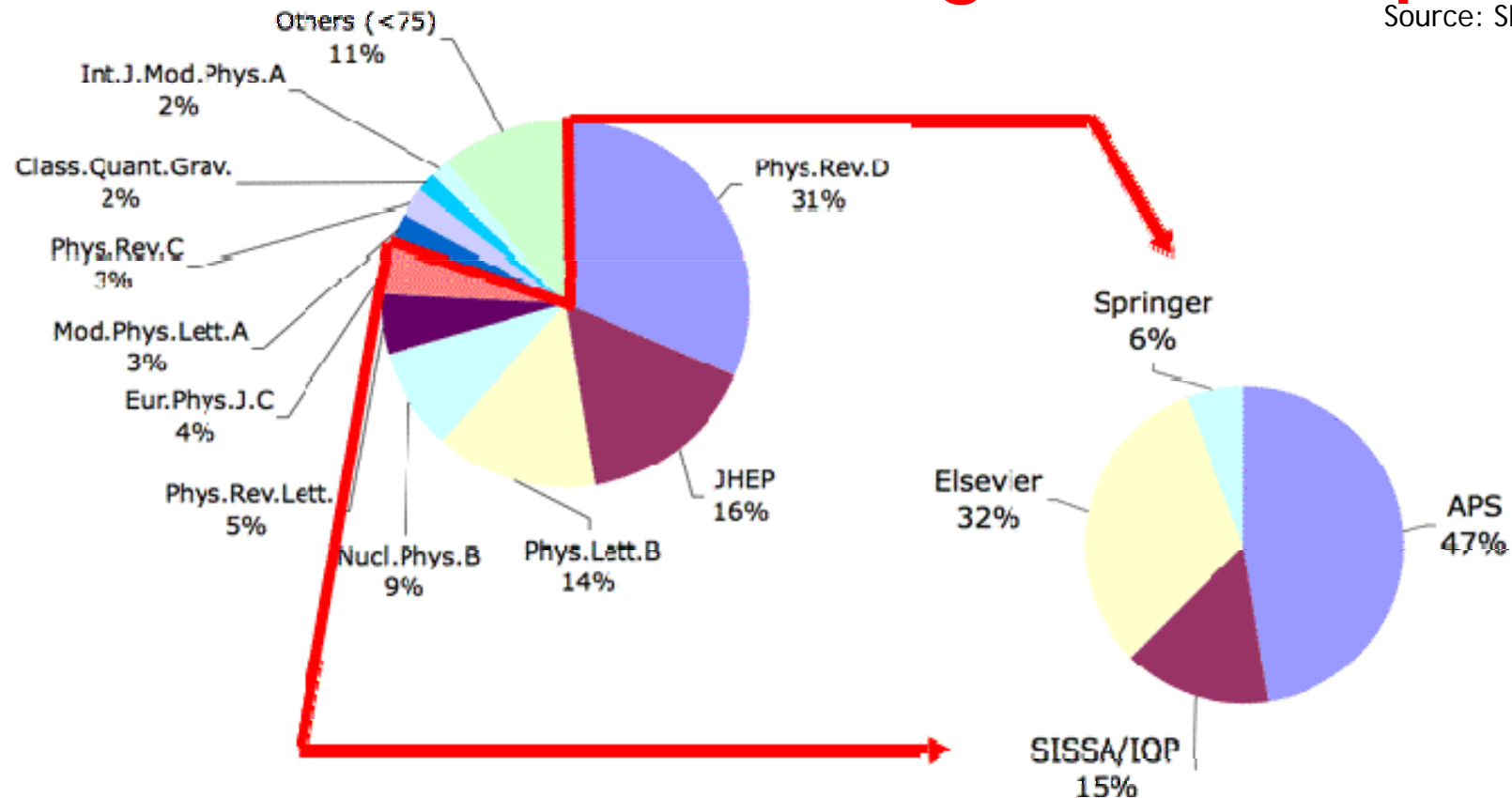
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CERN European Organization for Nuclear Research

scoap3.org

The HEP publishing landscape

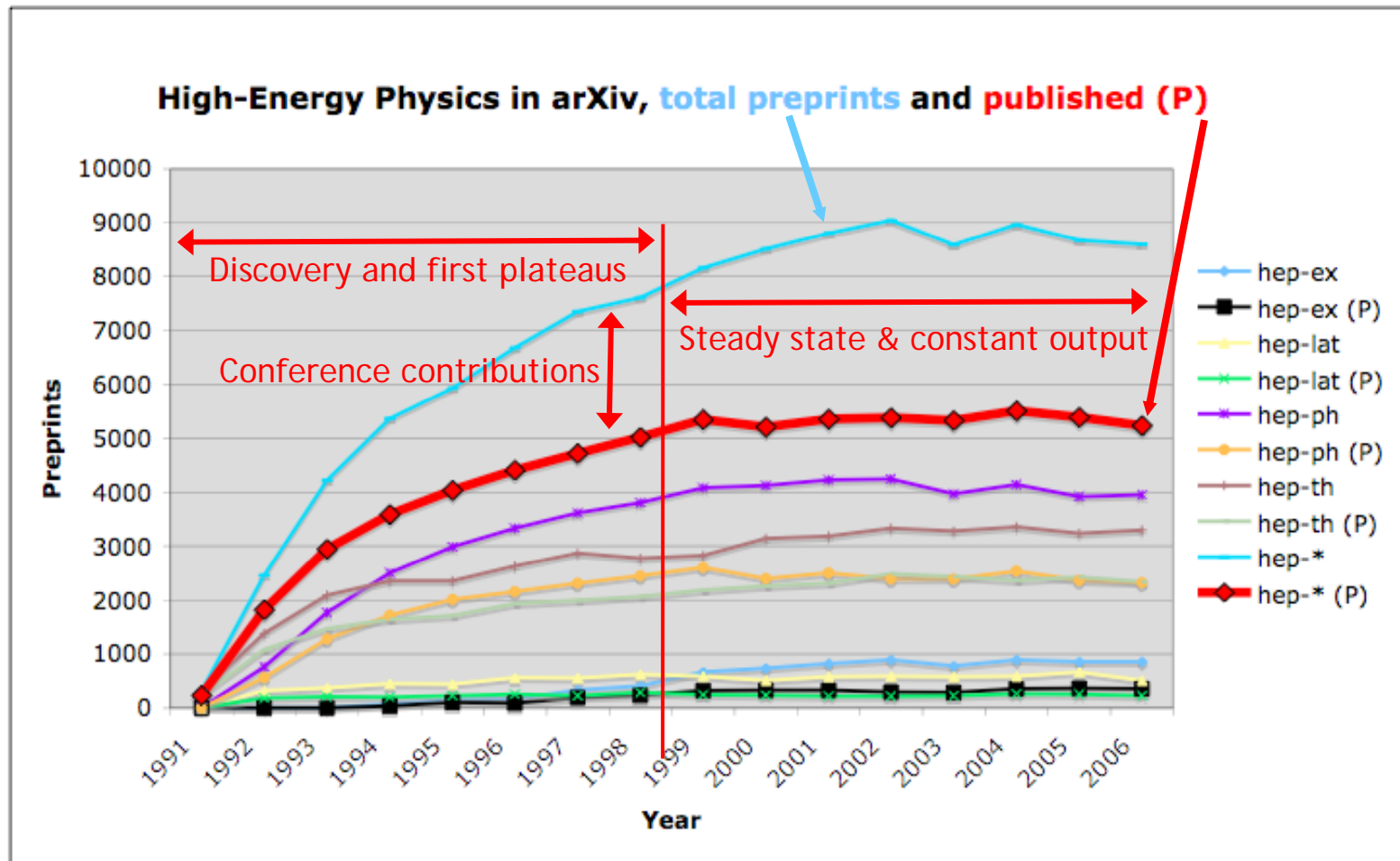
Source: SPIRES, 2006



- 5000-7000 HEP articles/year, according to definition of HEP
- Practically all articles are available as arXiv OA pre/post-prints
- 90% of articles are in theory
- 80% of articles published in 6 leading journals by 4 publishers
- 62% of articles by not-for-profit (nor-for-loss) publishers

SCOAP³ is not limited to any set of journals but open to all high-quality HEP journals!

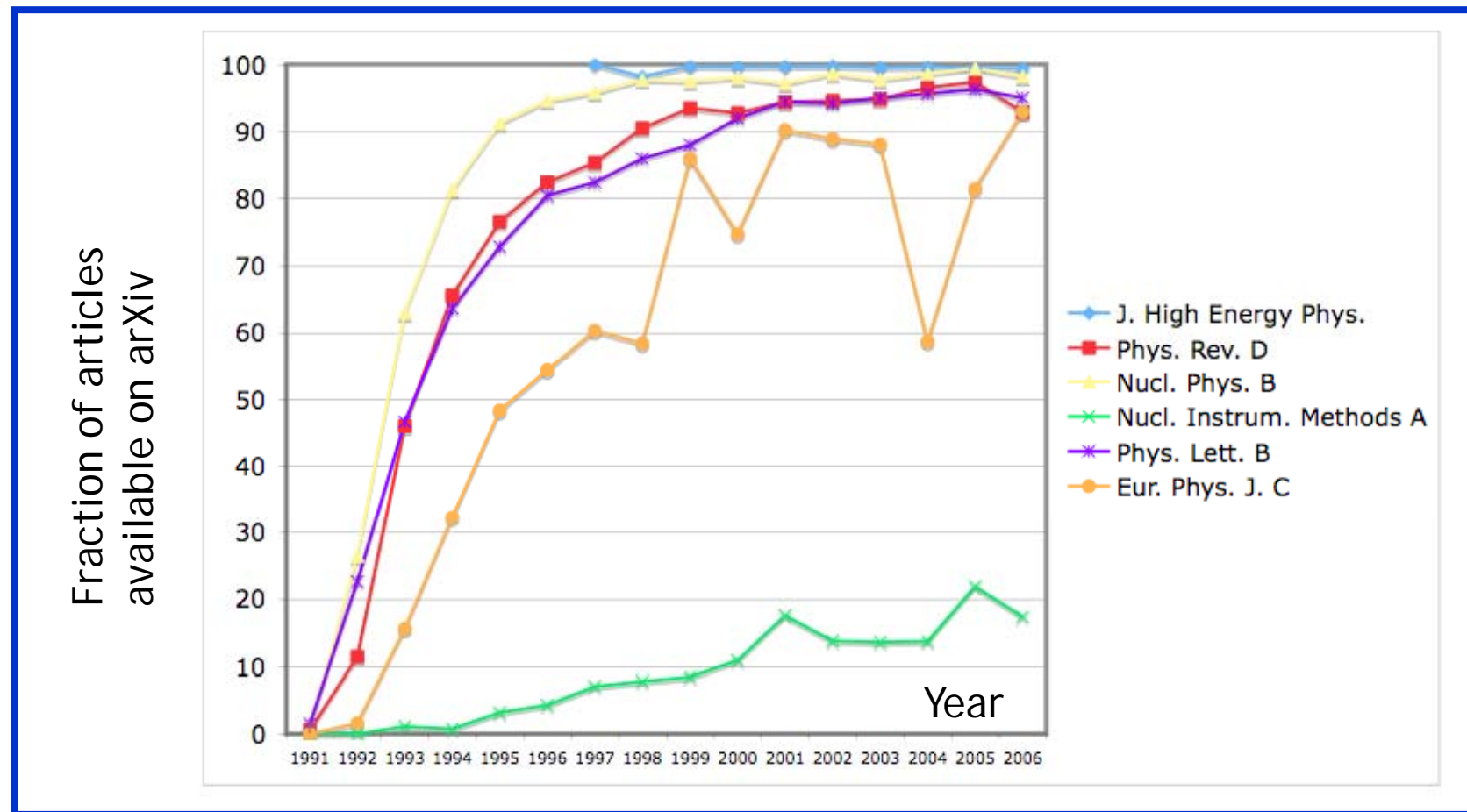
arXiv (Cornell), the archetypal subject repository



(Green) Open Access, second nature: posting to arXiv before even submitting to a journal is common practice

- No mandate, no debate, no advocacy. Author-benefit driven
- Author-formatted peer-reviewed revisions routinely uploaded

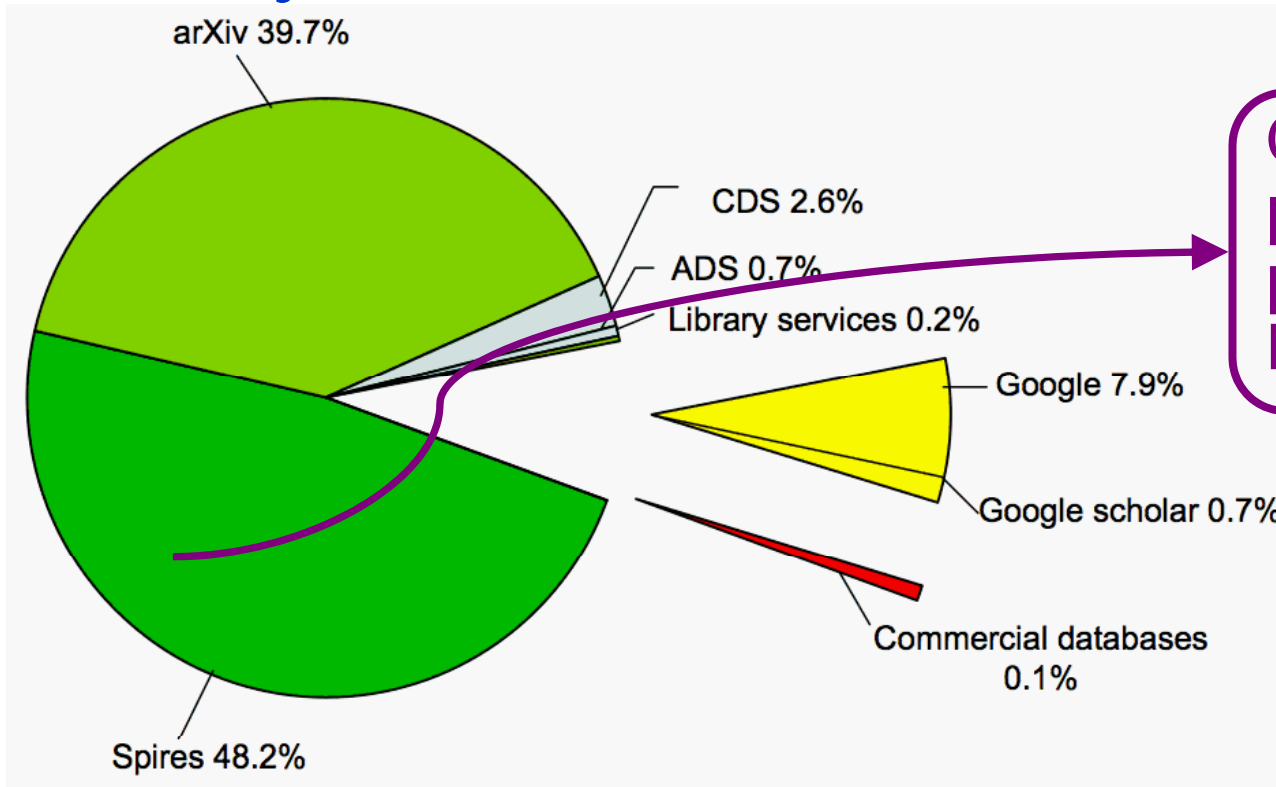
Journals are almost entirely available on arXiv



Information discovery in HEP

User survey with over 2000 answers

Gentil-Beccot *et al.* arxiv:0804.2701



Catalogue of preprints and published material. Est. 1974

91 % Community services 9% Google <0.1% Commercial services

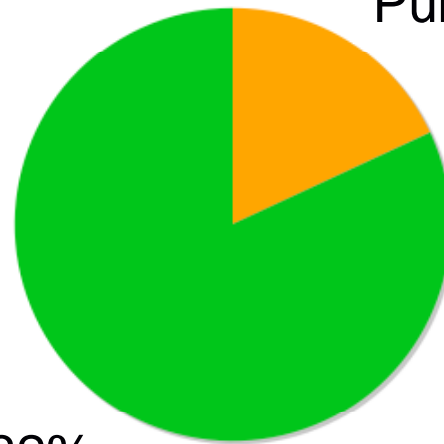
- 40 % Subject repositories
- 51 % Lab-supported databases

are needed to see this picture.

What do readers do when offered a choice between an arXiv pre-/post-print AND journal?

Clicks to DOIs and arXiv from Spire database in
October 2008

30,000 clicks (choice between arXiv and journal)



Publisher server 18%

arXiv 82%

Don't forget "direct" arXiv users who are not in the plot



HEP and its journals

- Journals are on the way to lose (lost?) a century-old role as vehicles of scholarly communication
- Still, evaluation of institutes and (young) researchers is based on high-quality peer-reviewed journals
- The main role of journals is to assure high-quality peer-review and act as keepers-of-the-records
- The HEP community needs high-quality journals, our "interface with officialdom"
- Implicitly, the HEP community supports this role by purchasing subscriptions, as ~80-90% reads only arXiv
- HEP community leads in Open Access
- Fertile ground to experiment with a business model for journal-administered peer-review services against a unique background of complete self-archiving

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
~1000 from the US

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

Open Access business models in HEP

(and percentage of HEP literature)

Springer Open Choice



SPONSORED ARTICLE



Hybrid model: Per-article OA fee on top of subscriptions

- Negligible success in HEP. Author FAQ: why pay something (peer-review) you can get for free (the library pays subscriptions) ($\ll 1\%$)

DEUTSCHE PHYSIKALISCHE GESELLSCHAFT | IOP Institute of Physics

New Journal of Physics

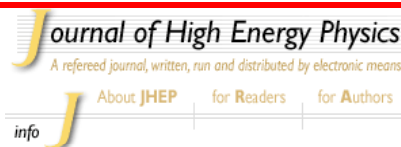
The open-access journal for physics



Advances in High Energy Physics

Author-pays: No subscriptions. Authors (institutions) pay per-article journals processing fees

- Model in its infancy in HEP. Author FAQ: why pay something you can get for free elsewhere (the library pays subscriptions) ($\ll 1\%$)



A refereed journal, written, run and distributed by electronic means

info About JHEP for Readers for Authors for Referees for Editors



an IOP and SISSA journal

info About JINST for Readers for Authors for Referees for Editors

Institutional membership: for a (small) fee in addition to subscriptions, all articles with at least one author from the institution are OA

- Leading laboratories and the entire France trying this scheme.
- Authors like OA without financial barriers in high-IF journals ($\sim 4\%$)

Recent Open Access developments in HEP

- While waiting for SCOAP3 to become operational publishers offer some no fee Open Access solutions!
 - Springer: experimental HEP articles and letters in *Eur. Phys. Jour. C*
 - EPS: HEP articles in *Europhys. Lett.*
 - Elsevier: HEP articles from the LHC
 - (In addition, SISSA/IOPp institutional membership implies 20% HEP is OA)
- Seminal articles describing construction of LHC are published OA in SISSA/IOPp *Journal of Instrumentation*
 - 7 articles/1600 pages/8000 authors. Large-scale OA publishing operation
 - 60'000+ downloads from journal site in two months!
- 3000-scientists CMS collaboration at LHC votes to “privilege SCOAP3-friendly journals” for its articles

QuickTime™ and a
decompressor
are needed to see this picture.

The SCOAP³ 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 SCOAP³, which pays centrally for the organization of the peer-review service, through a call for tender, which determines a price-per-article. Articles are free to read for everyone.

- Five “core” journals: PRD, JHEP, PLB, NPB, EPJC
 - Carry a majority of HEP content: aim to convert entirely to Open Access
- Two “broadband” journal: PRL, NIM
 - 10% & 25% HEP: conversion to Open Access of this fraction
- Other, lower-volume, high-quality HEP journals
 - conversion to Open Access of the HEP content

SCOAP³ is not limited to any set of journals but open to all high-quality HEP journals!

Guesstimating the budget envelope

(€/€ exchange rate of April '07)

- *Physical Review D* (APS) operates with
~2.7M Eur/year (31% of arXiv:hep)
- *Journal of High Energy Physics* (SISSA/IOP) needs
~1M Eur/year (19% of arXiv:hep)

HEP Open Access price tag: 10M Euros/year

- A published PRD article costs APS ~1500 Eur
- 6-8 leading journals publish 5000-7000 articles a year

The final price-tag for SCOAP³ will be known after a call for tender for the peer-review and other editorial services will be placed with publishers

[no money changes hands on the basis of this guesstimate]

SCOAP³ financing

SCOAP³ 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.

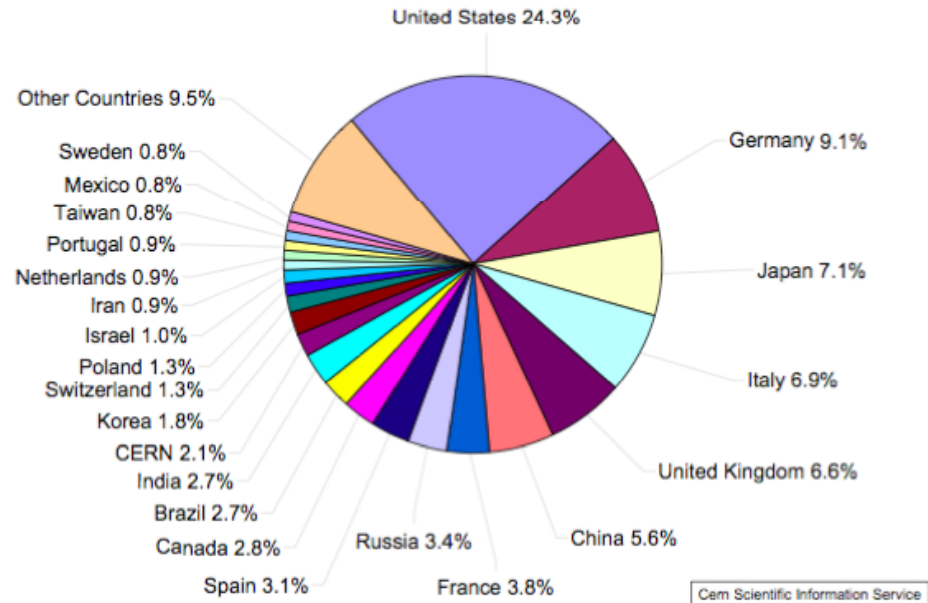
The model is viable only if every country is on board!
Success through consensus and unanimity, not majority.
Not a weakness: a strength!

Make a 10% allowance for developing countries who at the beginning might not contribute to the scheme.

Allowing only SCOAP³ partners to publish Open Access would replicate the subscription scheme and not solve the problems.

Distribution of HEP articles by country, average 2005-2006

Krause *et al.* CERN-OPEN-2007-014

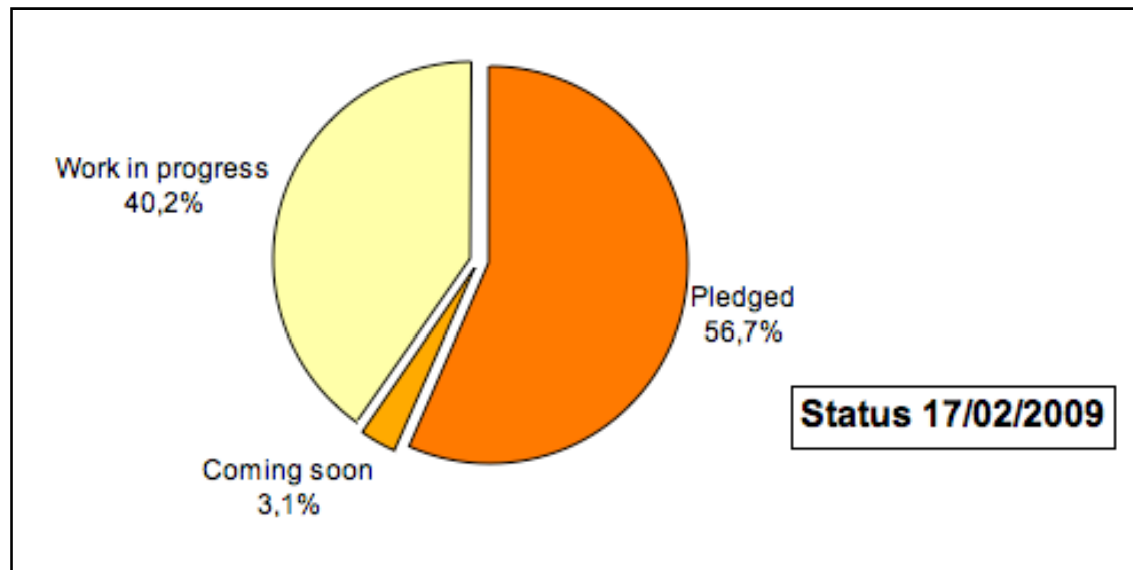


SCOAP³ funding mechanism

- Funding partners identify country-by-country schemes to **re-direct** journal subscriptions to SCOAP³
- Countries **pledge** their contribution to SCOAP³
 - Countries with centralized structures for licensing join through their national consortium
 - Countries where subscriptions are paid by HEP funding agencies join through these agencies
 - In the U.S., single institutional and consortial partners join SCOAP³ directly
- Pledges **conditional** to contractual conditions with publishers in line with the SCOAP³ 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

57% of funds have been or are about to be pledged by library consortia, HEP funding agencies, national libraries



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

Australia	Israel, Turkey
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50 US partners (>50%)

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

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

Next steps for SCOAP3

- Negotiations advance in a few outstanding countries and US institutes which pledge their contribution to SCOAP3 through an Expression of Interest [no money changes hands]
- Once a “sizeable fraction” of budget is pledged, reflecting the international character of SCOAP3
 - SCOAP3 formally established, with international governance
 - SCOAP3 can issue a tender to publishers [no money changes hands]
- Publishers answer the tender quoting a price-per-article and agreeing to unbundle packages, removing SCOAP3 titles, and reducing prices accordingly [no money changes hands]
- SCOAP³ international governing board adjudicates contracts [no money changes hands]
- Contracts with publisher are signed and funds are transferred to SCOAP3 [payments happen]



Merci!

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<http://scoap3.org>

