Living with the
Sponsoring Consortium for Open Access Publishing in Particle Physics
Behind the Scenes at SCOAP³

Or How I learned to stop worrying and love the LHC (and the Higgs boson)

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Fiesole Retreat
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Refresher: What/Who is SCOAP³?

• An innovative model to achieve open access to peer-reviewed journals in high-energy physics (HEP)
  – Converts HEP articles in the leading journals to “gold” open access

• Aims to convert an ENTIRE (sub)discipline FROM journals’ current subscription-based model TO open access

• Supports strongly the values provided by quality publishers and their journals
  – Quality assurance in the publication process (peer review and editorial services)
  – Provision of the final published versions
  – The journals remain as they are - submissions, sites, etc.
What/Who is SCOAP$^3$?

- Product of extensive coalition-building with stakeholders in the community of scholarly communication across the world
  - Requested by the high energy physicists who work on CERN-sponsored global projects – “final version matters”
  - Researchers/authors, funders, libraries, and publishers
- CERN, the center of the global high-energy physics community, has led the SCOAP$^3$ efforts and will administer/host going forward, sharing leadership with the global community
- SCOAP$^3$ negotiates APCs with publishers *globally*, representing all library & research partners
Estimated annual budget

- Broad range of pricing for OA journal articles averages around 1500 Euro
- 7,000 HEP articles are published per year (approx)
- SCOAP³ currently includes about half of these, i.e., 3,500 articles
- Therefore, budget envelope is estimated at 5M euro
- Libraries are paying comparable amounts for their subscriptions
- SCOAP³ assumes sufficient funds in the system to pay the APCs and keep these journals running
- Libraries foot the bill for this open access
Participating publishers agreed

- To pull participating journal $$ out of existing packages or “big deals“ (instead will be paid by CERN for these)
- NOT to “double-dip“
- To a standard way of calculating the “reduction“ or “re-direct“ funds
- Participation in a joint “reconciliation“ process
- To stay in the program for the initial 3 years
- To not raise APCs for 3 years
- To use 2011 data for estimated number of articles
- To use 2013 library prices as the base for SCOAP³ Phase I (2014-16)
SCOAP$^3$ Steering Committee

“to co-ordinate the SCOAP$^3$ tendering process, designing the consortium governance, and bringing the initiative into its operational phase”

- Jun Adachi, NII, Japan
- Paul Ayris, JISC Collections, U.K.
- Stefano Bianco, INFN, Italy
- Miriam Blake, LANL, U.S.
- Martin Koehler, DESY, Germany
- Salvatore Mele, CERN, Switzerland (Convener)
- Joao Moreira, FCCN, Portugal
- Ann Okerson, CRL, U.S.
- Ralf Schimmer, MPG, Germany
- Xiaolin Zhang, CAS, China
- Ivy Anderson, CDL, U.S. (ex-officio TWG liaison)
SCOAP$^3$ Technical Working Group

“to address the key question of the price reduction for content today in large-scale subscription packages and eventually to be converted by SCOAP$^3$ to Open Access [...] collect requirements, analyse principles, and suggest ways forward toward a concrete implementation and monitoring”

- Ivy Anderson, CDL, U.S. (chair)
- Paola Gargiulo, CASPUR, Italy
- Anne Gentil-Beccot, CERN, Switzerland
- Paul Harwood, JISC Collections, U.K.
- Carol Hoover, LANL, U.S.
- Tomonari Kinto, Tokyo, Japan [support: Satoru Kinoshita]
- Angelika Kutz, TIB, Germany
- Tom Sanville, LYRASIS, U.S.
- Jiancheng Zheng, CAS, China
Fair Share Principle
Each country contributes its share of worldwide HEP article publications
SCOAP$^3$ Timeline - the long view

2005-2006 - Consultation within HEP research community and internal consensus on the SCOAP$^3$ idea

2007 - Initial rough design of the business model

2008-2010 - Worldwide outreach and collect “expressions of interest”

2011 - Go-ahead decision from DG, start operationalizing

2012 - Publisher tender concluded; results published

Oct 1, 2012 - Launch meeting with NCPs & outreach begins

2013 – Calculations, reconciliations, CERN to sign contracts

2014 – Start operations

2015 – Design next tender process to go-live 2017
# SCOAP³ Tender Results

(Alphabetical order)

<table>
<thead>
<tr>
<th>Publisher</th>
<th>Journal</th>
<th>SCOAP³ Articles (2011)</th>
<th>SCOAP³ Percentage (2011)</th>
<th>APC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elsevier</td>
<td>Nuclear Physics B</td>
<td>284</td>
<td>ALL</td>
<td>1800 USD</td>
</tr>
<tr>
<td>Elsevier</td>
<td>Physics Letters B</td>
<td>1010</td>
<td>ALL</td>
<td>2000 USD</td>
</tr>
<tr>
<td>Hindawi</td>
<td>AHEP</td>
<td>28</td>
<td>ALL</td>
<td>1000 USD</td>
</tr>
<tr>
<td>IOPp/DPG</td>
<td>New Journal of Physics</td>
<td>20</td>
<td>2.7%</td>
<td>1000 GBP</td>
</tr>
<tr>
<td>IOPp/SISSA</td>
<td>JCAP</td>
<td>138</td>
<td>30.9%</td>
<td>1200 GBP</td>
</tr>
<tr>
<td>IOPp/CAS</td>
<td>Chinese Physics C</td>
<td>16</td>
<td>7.2%</td>
<td>1400 GBP</td>
</tr>
<tr>
<td>Jagellonian</td>
<td>Acta physica polonica B</td>
<td>23</td>
<td>22.1%</td>
<td>500 EUR</td>
</tr>
<tr>
<td>Springer/SISSA</td>
<td>JHEP</td>
<td>1652</td>
<td>ALL</td>
<td>1000 GBP</td>
</tr>
<tr>
<td>Springer/SIF</td>
<td>EPJC</td>
<td>326</td>
<td>ALL</td>
<td>1500 EUR</td>
</tr>
<tr>
<td>OUP/PSP</td>
<td>PTP</td>
<td>46</td>
<td>36.2%</td>
<td>1200 EUR</td>
</tr>
<tr>
<td><strong>TOTAL ARTICLES</strong></td>
<td></td>
<td><strong>3554</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>AVG SCOAP³ CONTRACTS</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>1160 EUR</strong></td>
</tr>
</tbody>
</table>
What’s happening now?

- System of NCPs was created (national contact persons)
- Libraries are working through their designated contacts to calculate & upload the calculated $$ to a “reconciliation facility” at CERN
- So are publishers
- Cost reductions calculated by libraries and publishers being reviewed as part of a reconciliation process, to determine final amount – this has just begun
- Outreach to library partners with new MoU
  - Ongoing operation of the consortium will be overseen by a governance organization comprising representatives of the SCOAP³ partners in the respective countries
Challenges along the way?

- Biggest one: Untangling the Package or Big Deal
- Publishers agreed to this as a condition for participation
- So, the big question is, “How much does each of these journals cost now?”
  - Need to extract the funds from current fees in order to pay publisher APCs
- Libraries and publishers disagree on the $$ reduction for the same titles in libraries’ deals
  - Oh-oh!
Is it possible to untangle a “big deal?”
5 access scenarios & calculation spreadsheets

• S. 1: Journal is singly purchased (rare)
• S. 2: Packages in which individual journal costs are “known”
• S. 3: Packages based on historical spend
  – Cost of individual titles at time of conversion to big deal
  – Identify start year: input all annual price caps
• S. 4: Packages with a single fixed cost
  – Formulae were developed based on journal’s relational size in package
• S. 5: Unsubscribed titles within packages
  – Requires knowing total value of package and what top-up or cross-access or content fees were paid for titles the publisher threw in “for free”
So we all went away and calculated...

• All scenarios were “piloted” with publishers in advance, so that both could do the calculations and compare

• Yet, out of “my” first 175 spreadsheets analyzed for matches between library & publisher $$:
  – 123 title calculations fell within 1% variation, but almost none were exact
  – 27 calculations within 1-5% variation (4.3%)
  – 25 calculations = over 5% variation
  – AND - Pubs andlibs disagreed on 95 scenario choices
What have I learned so far?

• A lot of work for all concerned
  – We trained about 150 people in US on doing “Calculator” spreadsheets
  – Reviewed and submitted each one to CERN
  – Publishers are submitting their calculations
  – Full “reconciliation” will be a LOT more work

• Lots of complexities: top up fees, special negotiations, special packages

• Underlying business models change over time; publishers/libraries interpret the results differently
What have I learned so far?

• Publishers do not always seem to understand what arrangements they have made
• There is much more consistency on the society publishers’ pricing for packages than the for-profits
  – Smaller packages are easier to untangle?
• Results of libraries’ bargaining have assured that very few libraries are paying similar prices for their titles in the Biggest Deals – a ‘dog’s breakfast’
• Too little of the US pricing makes overall sense
• Does this matter? (I think so)
More challenges

• Soliciting US Partners
• No centralized system of higher education or library services (Multiple organizations, huge diversity)
• Who are the HEP journal subscribers?
  – *WorldCat* as a surrogate
• Approach individually
  – Not every library wants to participate
• Selling the *Encyclopedia Britannica*
More challenges

- Building the global partnership
  - No pre-existing solidarity or organization
  - Inventing governance
  - arXiv, R4L, IFLA, CERN models
- Moving from mistrust to partnership
- Did we make the process too complicated?
- Meanwhile the world around us has changed
- And – can you just change one thing?
  Downstream consequences...
More lessons

• The value of a strong Lead Organization
  – Working with CERN and its global network
  – Constant reminder that we’re serving scientists
  – Excellent Project Leader
  – Excellent legal and purchasing staff
  – Principles of Fairness and Transparency apply at all times
Can this process be replicated?

• As you’ve heard, this has been complicated
  – Inventing the plane as we fly it
  – Learning experience for all
  – Has taken much longer than anyone thought
  – APS dropped out with sustainability concerns
• We believe we’ve shown a way forward, and our work can be adapted and simplified for future conversions
  – Need a willing host organization (could be a publisher!)
  – Need an interested discipline with manageable title size
  – Our documents and processes open and freely shareable
The Wider Context

• SCOAP$^3$ prompts libraries into active engagement with open access and transforming traditional journals into OA journals

• February 2013 – US federal open access mandate

• May 2013 – the Global Research Council (70 funding agencies) Summit recommends "an action plan to implement open access as the main paradigm of scholarly communications"
  – Recommend supporting Gold OA and transferring subscription funds of libraries to pay for OA fees

• June 2013 – G8 Science ministers advocate globally coordinated open access
  – https://www.gov.uk/government/publications/g8-science-ministers-statement-london-12-june-2013

• SCOAP$^3$ – an experiment worth doing
Thank you for your attention and ideas