Scientific Information Policy Board (SIPB) report

ACCU representatives:
Federico Ferri,
Clara Troncon

ACCU meeting, March 7, 2017
 Scientific Information Policy Board:

The Scientific Information Policy Board (Continuation of the Library Committee as of November 1989) is an inter-divisional body reporting to the Director General. It deals with any matters related to policies and strategies of scientific information services to the high energy physics community, inter alia library and documentation services and scientific editing and report production services.

see http://library.cern/about_us/policyboard for full mandate description

Last report: 107th ACCU meeting, 10.3.2015

5 SIPB meetings since then

Next SIPB meeting on the 27th of April: agenda available
Outline

■ News a latest developments in SCOAP³
  ■ Sponsoring Consortium for Open Access Publishing in Particle Physics

■ ORCID

■ Data preservation: HEPData developments

■ History preservation: scientific heritage

■ Library report: not addressed in this talk
  ■ see Jens Vigen’s report, today’s agenda

■ Side note: many of the improvements in several areas involves a huge effort in terms of technical contributions from CERN and often the Open Source community
  ■ spare this talk the technicalities
  ■ for a glimpse of them, look for Tim Smith’s reports at the SIPB (Digital Library Technologies and Services)
### SCOAP³: overview

**Overview of CERN publications per year**

<table>
<thead>
<tr>
<th>Category</th>
<th>Scientific Articles</th>
<th>Conference Proceedings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CERN publications avg. in typical year</td>
<td>700</td>
<td>300</td>
</tr>
<tr>
<td>Physics</td>
<td>20</td>
<td>300</td>
</tr>
<tr>
<td>Instrumentation &amp; Computing</td>
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<td>200</td>
</tr>
<tr>
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<td>15</td>
<td>320</td>
</tr>
<tr>
<td>Accelerators &amp; Engineering</td>
<td>85</td>
<td>450</td>
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<td>Accelerators &amp; Engineering</td>
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<td>40</td>
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<td>850</td>
<td>950</td>
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<tr>
<td>CERN affiliated author w/o CERN affiliation</td>
<td>40</td>
<td>660</td>
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**Status CERN Open Access**

<table>
<thead>
<tr>
<th>Category</th>
<th>Scientific Articles</th>
<th>Conference Proceedings</th>
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<tbody>
<tr>
<td>Physics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Open Access ratio CERN pub’s 2015</td>
<td>96%</td>
<td>90%</td>
</tr>
<tr>
<td>Physic</td>
<td>45%</td>
<td>42%</td>
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<tr>
<td>Instrumentation &amp; Computing</td>
<td>90%</td>
<td>90%</td>
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<td>29%</td>
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<td>83%</td>
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<td>87%</td>
</tr>
<tr>
<td>CERN affiliated author w/o CERN affiliation</td>
<td>25%</td>
<td>39%</td>
</tr>
</tbody>
</table>

- Costs of Open Access to CERN:
  - SCOAP³ 125 kCHF, special arrangements for non-SCOAP³ about 400 kCHF, corresponding on average to about 1.4 kCHF/article
- Conference proceedings in Open Access would be very demanding:
  +300 kCHF (+470 kCHF) to include only proceeding with CERN authors (also “belonging to” LHC collaborations)

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SCOAP$^3$: future

from A. Kohls, https://cern.ch/go/mtk8

History of CERN OA agreements

- APS PRSTAB (sponsorship since 2006) + ad-hoc APC payments
- JACoW (dev/ops support since 1997)
- IOPp JINST (2013-2016)
- IEEE (since 2013)
- Elsevier (2014-2016)

Where do we want to go?

- CERN OA Policy
- APS (LHC 2014-2016; other 2015-2016)
- LHC (since 2010)

- Physics
- Instrumentation & Computing
- Accelerators & Engineering

- Conference Proceedings

As presented to SIPB in March 2016

- Went where “wanted to go”: Open Access not extended to conference proceedings
- SIPB recommended the revised Open Access Policy for approval by the CERN Directorate
- APS bi-directional agreement being discussed as we speak
A recent PRD Editorial...

PHYSICAL REVIEW D 95, 030001 (2017)

Editorial: From the APS Editor in Chief

The journals of the American Physical Society welcome and will continue to welcome manuscripts from all countries, with publication based on scientific merit alone.

Pierre Meystre
Editor in Chief
American Physical Society

Published 3 February 2017
DOI: 10.1103/PhysRevD.95.030001
A parenthesis on ORCID

- Open Researcher and Contributor ID
- Universal ID that will follow a researcher throughout her/his career
- Can be used to uniquely identify an author across platforms and publication tracking systems
- (Almost) fully integrated with INSPIRE, expect soon some additional improvements to simplify its usage
- Some countries implement ORCID on a national level: Italy foresaw 80% of researcher with an ID linked to their research output by end of 2016, UK following with 1 year delay

→ advice your communities to consistently use it
  - particularly important if procedure to adopt it are enforced on newcomers
  - library staff very helpful in case of need
Preservation of physics data and results
from S. Dallmeier-Tiessen, https://cern.ch/go/R6gW

Currently two main possibilities:

- Open Data portal: release LHC dataset acquired by the four experiments
  - for science outreach
  - for other researchers to play with LHC data

- HEPData submission: release additional information (or in a more handy format) w.r.t. the published papers
  - for researchers, namely theoreticians and posterity
Open Data portal from S. Dallmeier-Tiessen, https://cern.ch/go/R6gW

- Invenio-powered, released at the end of 2014
- Outreach part available for the 4 experiments
- Research part (including simulations!) currently available for CMS
  - first ALICE release foreseen for 2018
  - first ATLAS and LHCb releases: after a “reasonable embargo period”

- The point of a growing iceberg: AMA (ask me anything) sessions, Kaggle challenges (Higgs, ATLAS-promoted), visualize detector events, etc.
- CERN analysis preservation: closed counterpart to open data that makes an analysis re-runnable
Open Data portal: non-negligible impact
from S. Dallmeier-Tiessen, https://cern.ch/go/r7QH

Impact

The Washington Post

Speaking of Science

Open sourcing the secrets of the universe huge amount of Large Hadron Collider now online

By Sarah Kaplan  April 26

Wired Science

Cern makes 300TB of data available

By EMILY REYNOLDS

25 Apr 2016

Teilchenbeschleuniger LHC: 300 Terabyte freigegeben

heise online  26.04.2016  11:34 Uhr  - Martin Holland
Invenio-based, consists of tools to upload relevant data for analysis, especially supplementary material such as data tables, likelihoods, etc.

As of today, search on 8426 publications and 68380 data tables

Rich and re-usable content, integrated with INSPIRElabs

Well considered by experiments: increased and consistent usage (ATLAS leading the effort), automatic tools and supporting teams developed.
Object Heritage  (a.k.a. CERN falling into pieces)

from E. Sanders, https://cern.ch/go/ZR7J

- Database set up in CDS with couple of hundreds of categorized objects (2002-2005) and nothing more in since then
- Define criteria for inclusion and update database with the object stories!
- Fundings requested to IR within the ECO group
Object Heritage (a.k.a. CERN falling into pieces)

from E. Sanders, https://cern.ch/go/ZR7J

- Improve conservation and optimize storage
- Add loan capabilities to CDS and use it (load agreement written with Legal Service)
- Improve background material, instigate object “sponsors” for important pieces
- Communicate within CERN: collect LHC objects and encourage loans
- Communicate outside CERN: encourage loans to museums and other boadies
- Great outreach opportunity!
Summary

- Large continuous CERN effort towards opening to the community and preserving in time:
  - publications (SCOAP³)
  - detailed results (HEPData)
  - data acquired by the LHC experiments (Open Data)
  - outreach tools (Open Data)
  - experimental parts (Object Heritage)

- A number of new tools have been released and are hardly worked on to harmonize, interlink and integrate all the material

- Very good impact on the scientific community and not only