



# Welcome to the SCOAP<sup>3</sup> Webinar!

SCOAP<sup>3</sup> Webinar & Forum

18 November 2014

# Introduction

SCOAP<sup>3</sup> Webinar & Forum

18 November 2014

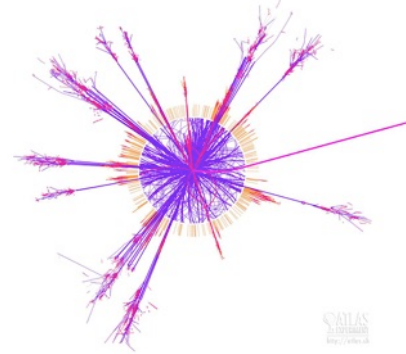


# The SCOAP<sup>3</sup> Webinar & Forum

## Introduction



- Continued trend towards OA
- Global collaboration across countries, publishers, libraries, research centers
- Inspired by culture of scientific collaboration



- Pre-print culture in HEP: mature community
- arXiv.org ubiquity (almost 100%)
- Incongruity of paying (journal) content, free on arXiv.org
- Peer-review journals crucial
- Global cooperation culture and infrastructure (CERN)



# The SCOAP<sup>3</sup> Webinar & Forum

18 November 2014

1 History, Business Model and Operations

2 Repository Services

3 A Forward Look

4 Questions & Answers





# History, Business Model and Operations

SCOAP<sup>3</sup> Webinar & Forum

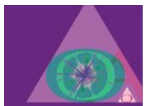
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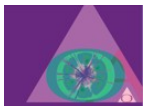
# History, Business Model and Operations

## Agenda

- 1 Why SCOAP<sup>3</sup> ?
- 2 A Brief Look To The Past
- 3 Tendering Process & APCs
- 4 Partnership & Governance



# Galileo Galilei (1564-1642), Italian, discovers Jupiter's Moons



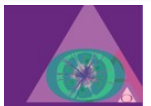


# The Earth rotates around the Sun!

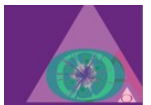
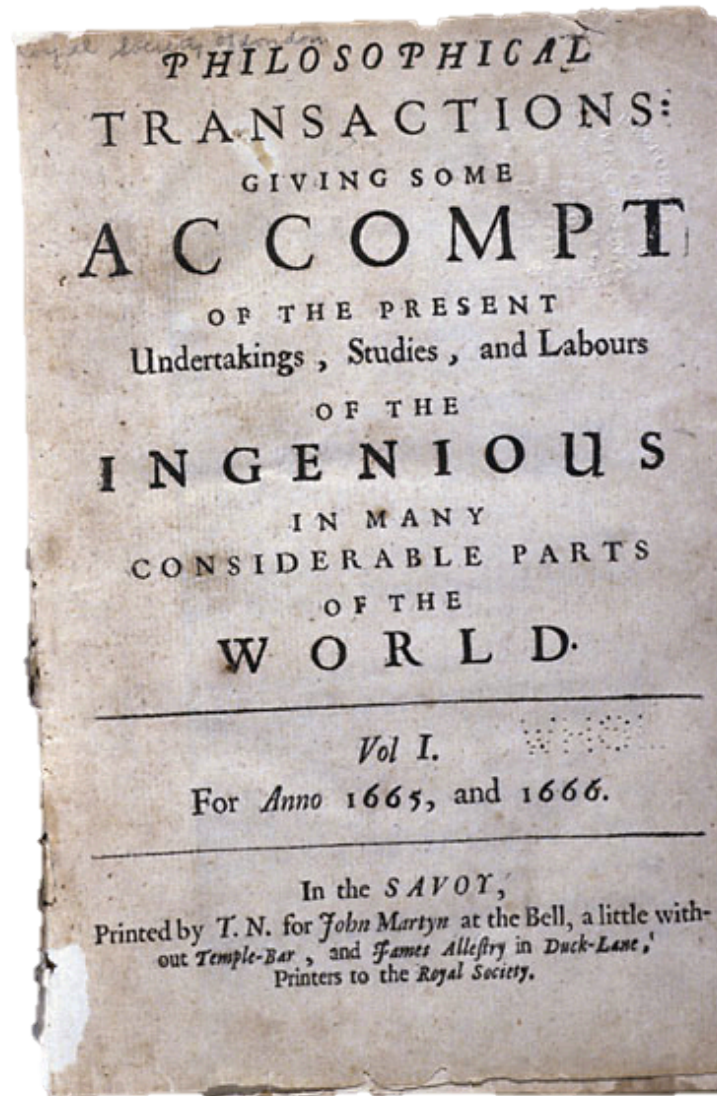
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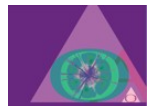
# Scientific journals: dissemination and attribution



# Scientific publication in High-Energy Physics



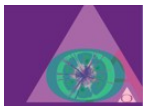
- High-Energy Physics ~7'500 papers/year
- 90% written by 1, 2 or 3 authors
- Only 2% of overall publications from CERN



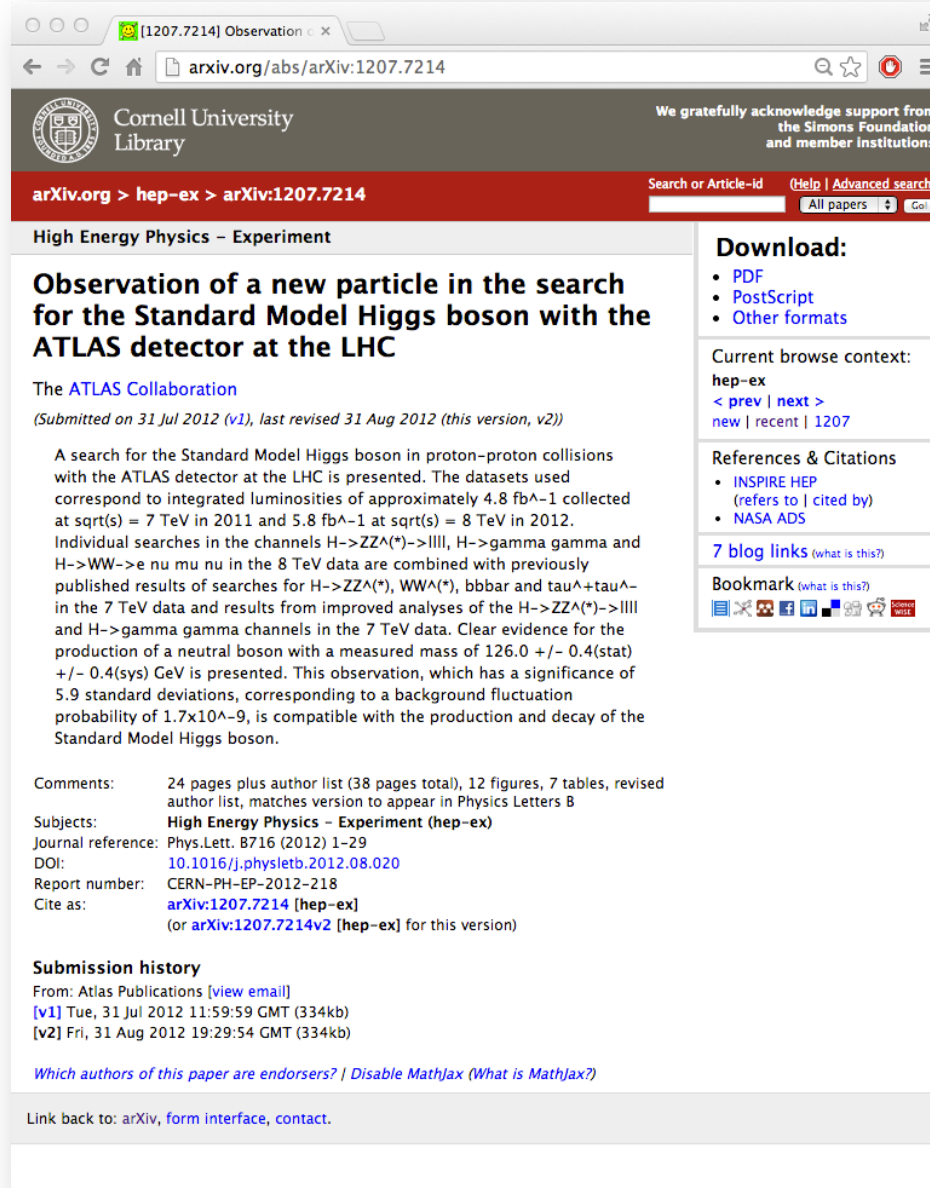


# HEP Researchers mailed each-other preprints of articles

CERN paper-based Open Access preprint repository 1954-1997



# Pre-print on the internet: arXiv.org (circa 1991)



The screenshot shows a web browser window with the URL [arxiv.org/abs/arXiv:1207.7214](http://arxiv.org/abs/arXiv:1207.7214). The page header includes the Cornell University Library logo and a message of gratitude from the Simons Foundation. The breadcrumb trail is [arXiv.org](#) > [hep-ex](#) > [arXiv:1207.7214](#). The main title is "Observation of a new particle in the search for the Standard Model Higgs boson with the ATLAS detector at the LHC". The authors are listed as "The ATLAS Collaboration". The submission date is "Submitted on 31 Jul 2012 (v1), last revised 31 Aug 2012 (this version, v2)". The abstract text describes a search for the Standard Model Higgs boson in proton-proton collisions with the ATLAS detector at the LHC. It mentions integrated luminosities of approximately 4.8 fb<sup>-1</sup> at sqrt(s) = 7 TeV in 2011 and 5.8 fb<sup>-1</sup> at sqrt(s) = 8 TeV in 2012. Individual searches in the channels H -> ZZ(\*) -> llll, H -> gamma gamma and H -> WW -> e nu mu nu in the 8 TeV data are combined with previously published results of searches for H -> ZZ(\*), WW(\*), bbbbar and tau^+ tau^- in the 7 TeV data and results from improved analyses of the H -> ZZ(\*) -> llll and H -> gamma gamma channels in the 7 TeV data. Clear evidence for the production of a neutral boson with a measured mass of 126.0 +/- 0.4(stat) +/- 0.4(sys) GeV is presented. This observation, which has a significance of 5.9 standard deviations, corresponding to a background fluctuation probability of 1.7 x 10^-9, is compatible with the production and decay of the Standard Model Higgs boson.

Comments: 24 pages plus author list (38 pages total), 12 figures, 7 tables, revised author list, matches version to appear in Physics Letters B

Subjects: **High Energy Physics - Experiment (hep-ex)**

Journal reference: Phys.Lett. B716 (2012) 1-29

DOI: [10.1016/j.physletb.2012.08.020](https://doi.org/10.1016/j.physletb.2012.08.020)

Report number: CERN-PH-EP-2012-218

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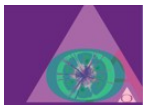

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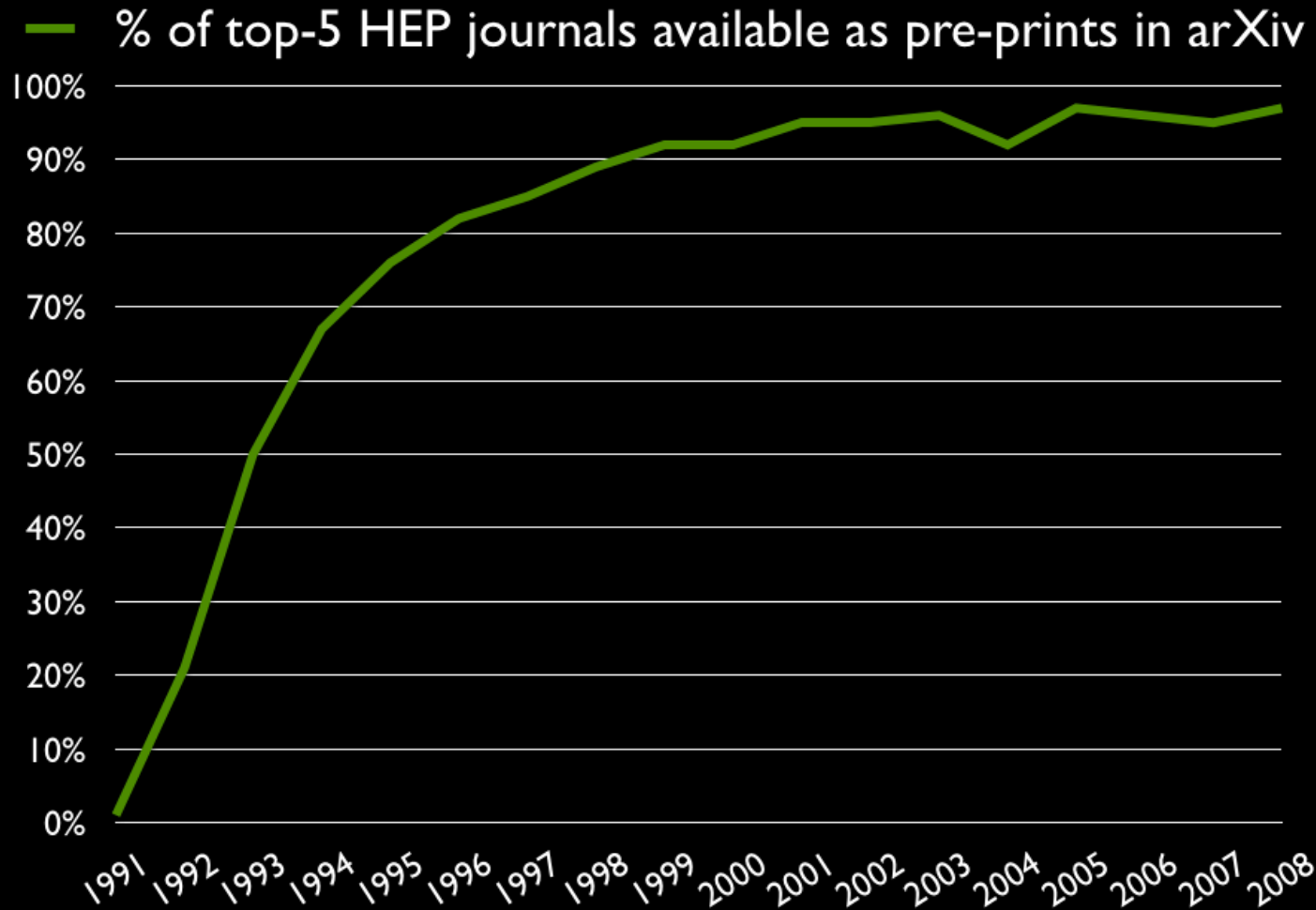
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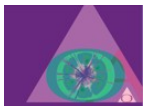




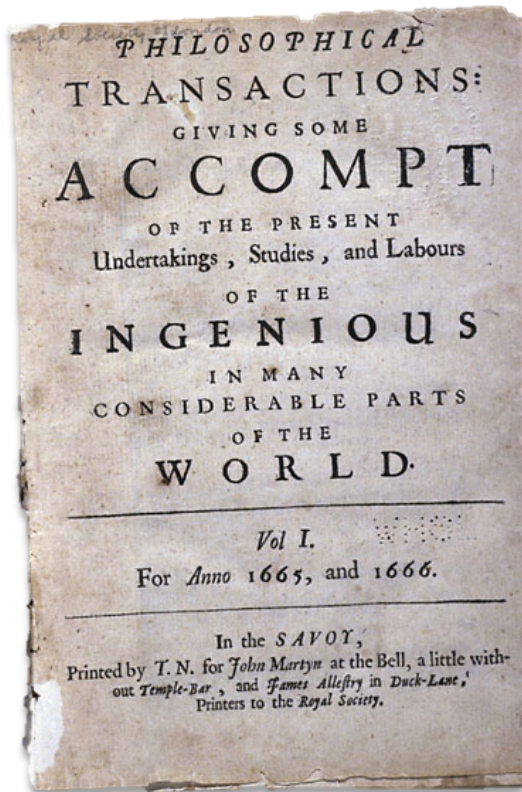
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Gentil-Beccot, Mele, Brooks, [arXiv:0906.5418](https://arxiv.org/abs/0906.5418)



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Physics Letters B 716 (2012) 1-29

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Indirect limits on the SM Higgs boson mass of m<sub>H</sub> < 158 GeV at 95% confidence level (CL) have been set using global fits to precision electroweak results [12]. Direct searches at LEP [13], the Tevatron [14-16] and the LHC [17,18] have previously excluded, at 95% CL, a SM Higgs boson with mass below 600 GeV, apart from some mass regions between 115 GeV and 127 GeV.

Both the ATLAS and CMS Collaborations reported excesses of events in their 2011 datasets of proton-proton (pp) collisions at centre-of-mass energy sqrt(s) = 7 TeV at the LHC, which were compatible with SM Higgs boson production and decay in the mass region 124-126 GeV, with significances of 2.9 and 3.1 standard deviations (sigma) respectively [17,18]. The CD and DD experiments at the Tevatron have also recently reported a broad excess in the mass region 120-135 GeV, using the existing LHC constraints, the observed local significances for m<sub>H</sub> = 125 GeV are 2.7sigma for CD [14], 1.1sigma for DD [15] and 2.8sigma for their combination [16].

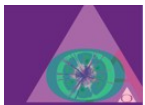
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In the H -> WW(\*) -> e mu nu channel, the increased pile-up deteriorates the event missing transverse momentum, E<sub>T</sub><sup>miss</sup>, resolution, which results in significantly larger Drell-Yan background in the same-flavour final states. Since the e mu channel provides most of the sensitivity of the search, only this final state is used in the analysis of the 8 TeV data. The kinematic region in which a SM Higgs boson with a mass between 110 GeV and 140 GeV is

<sup>\*</sup> © CERN for the benefit of the ATLAS Collaboration.  
<sup>†</sup> E-mail address: atlas.publications@cern.ch.

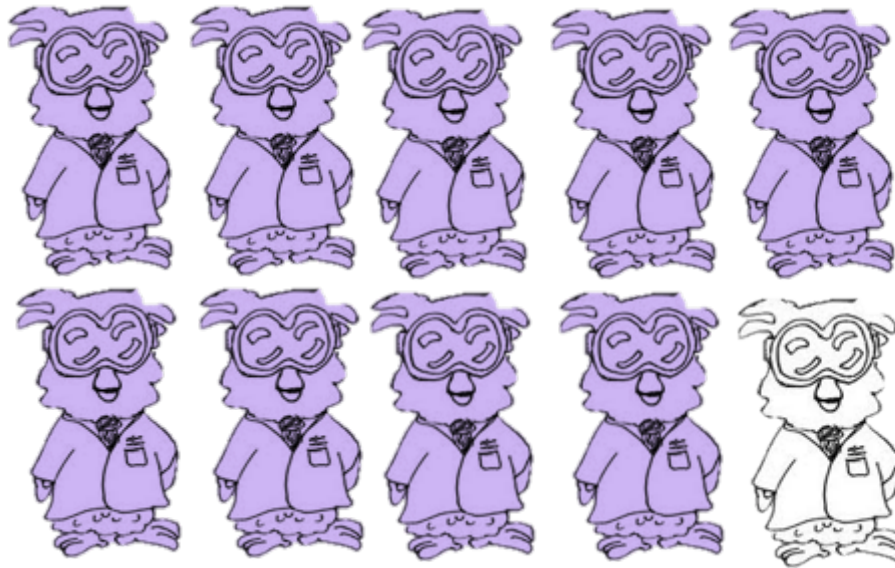
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<sup>1</sup> The symbol # stands for electron or muon.



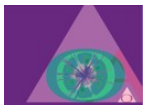
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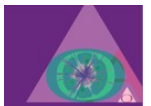
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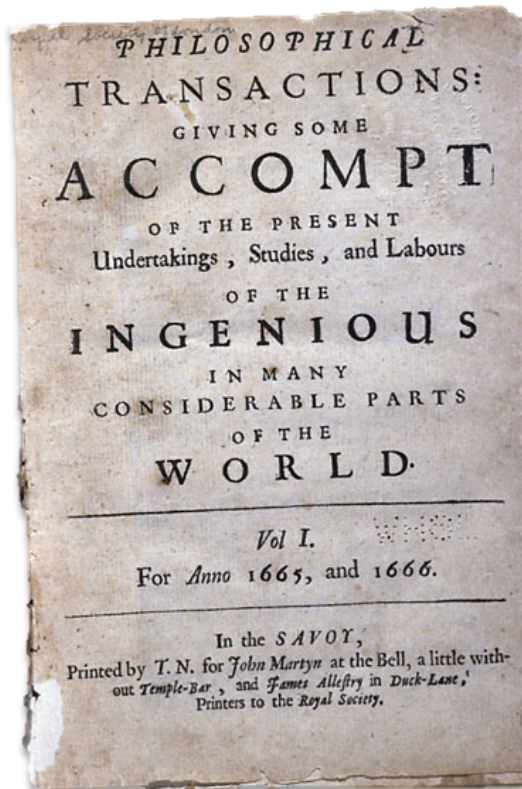


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High Energy Physics - Experiment

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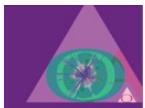
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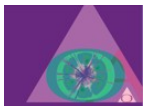
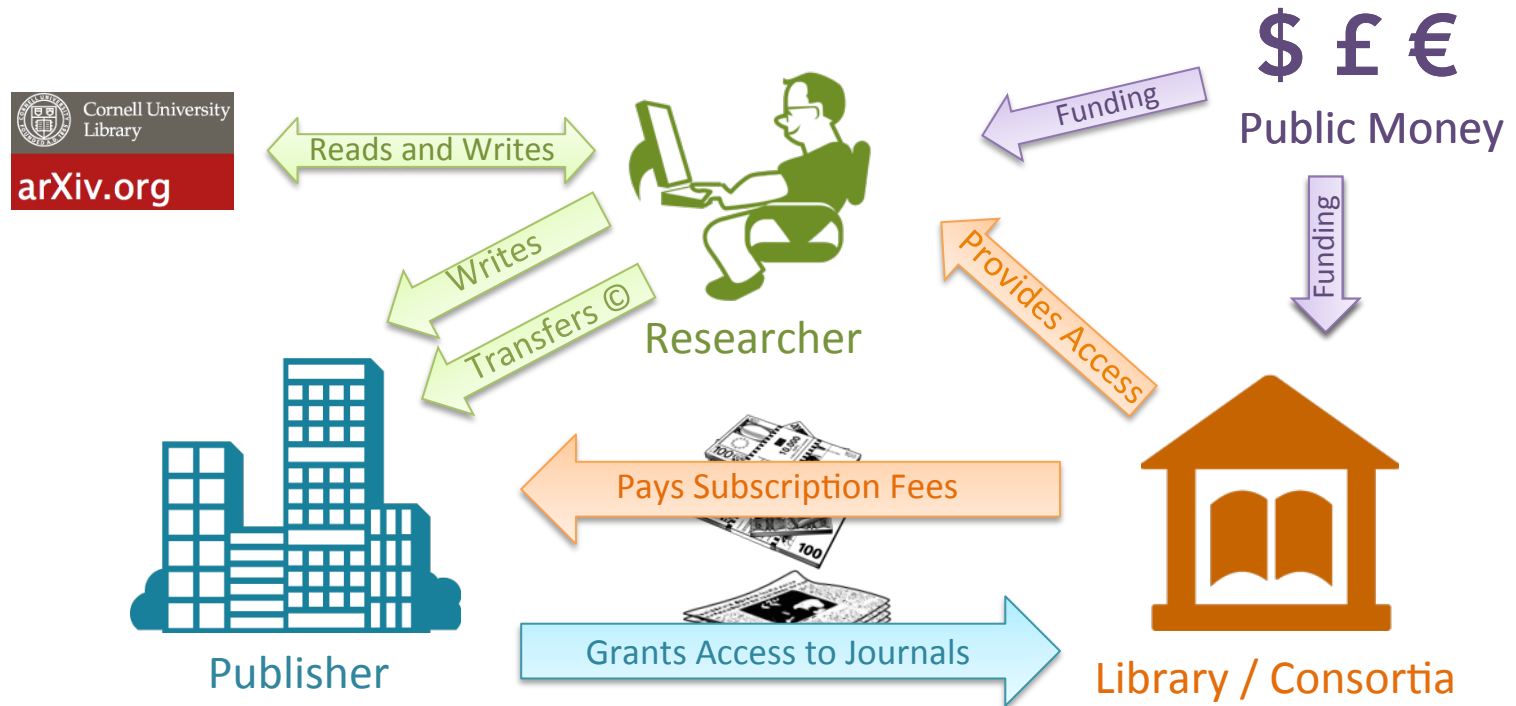
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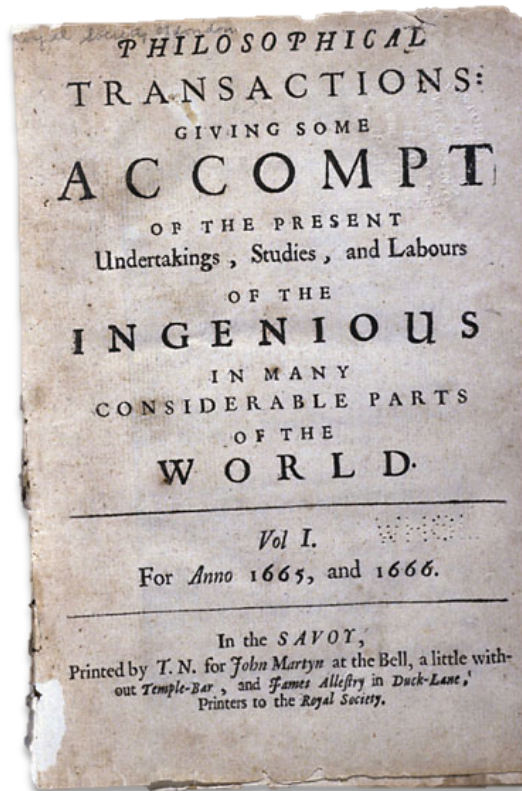


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# SCOAP<sup>3</sup> concept

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Physics Letters B 716 (2012) 1-29

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### Observation of a new particle in the search for the Standard Model Higgs boson with the ATLAS detector at the LHC<sup>a</sup>

ATLAS Collaboration<sup>\*</sup>  
This paper is dedicated to the memory of our ATLAS colleagues who did not live to see the full impact and significance of their contributions to the experiment.

ARTICLE INFO ABSTRACT

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Editor: W.-D. Schlatter

A search for the Standard Model Higgs boson in proton-proton collisions with the ATLAS detector at the LHC is presented. The datasets used correspond to integrated luminosities of approximately  $4.8 \text{ fb}^{-1}$  collected at  $\sqrt{s} = 7 \text{ TeV}$  in 2011 and  $5.8 \text{ fb}^{-1}$  at  $\sqrt{s} = 8 \text{ TeV}$  in 2012. Individual searches in the channels  $H \rightarrow ZZ^{(*)} \rightarrow 4\ell$ ,  $H \rightarrow \gamma\gamma$  and  $H \rightarrow WW^{(*)} \rightarrow \ell\nu\ell\nu$  in the 7 TeV data and results from improved analyses of the  $H \rightarrow ZZ^{(*)} \rightarrow 4\ell$  and  $H \rightarrow \gamma\gamma$  channels in the 7 TeV data. Clear evidence for the production of a neutral boson with a measured mass of  $126.0^{+0.4(\text{stat})+0.4(\text{syst})} \text{ GeV}$  is presented. This observation, which has a significance of 5.9 standard deviations, corresponding to a background fluctuation probability of  $1.7 \times 10^{-9}$ , is compatible with the production and decay of the Standard Model Higgs boson.

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### 1. Introduction

The Standard Model (SM) of particle physics [1–4] has been tested by many experiments over the last four decades and has been used to successfully describe high energy particle interactions. However, the mechanism that breaks electroweak symmetry in the SM has not been verified experimentally. This mechanism [5–10], which gives mass to massive elementary particles, implies the existence of a scalar particle, the SM Higgs boson. The search for the Higgs boson, the only elementary particle in the SM that has not yet been observed, is one of the highlights of the Large Hadron Collider (LHC) physics programme.

Indirect limits on the SM Higgs boson mass of  $m_H < 158 \text{ GeV}$  at 95% confidence level (CL) have been set using global fits to precision electroweak results [12]. Direct searches at LEP [13], the Tevatron [14–16] and the LHC [17,18] have previously excluded, at 95% CL, a SM Higgs boson with mass below 600 GeV, apart from some mass regions between 116 GeV and 127 GeV.

Both the ATLAS and CMS Collaborations reported excesses of events in their 2011 datasets of proton-proton (pp) collisions at centre-of-mass energy  $\sqrt{s} = 7 \text{ TeV}$  at the LHC, which were compatible with SM Higgs boson production and decay in the mass region 124–126 GeV, with significances of 2.9 and 3.1 standard deviations ( $\sigma$ ), respectively [17,18]. The CDF and D0 experiments at the Tevatron have also recently reported a broad excess in the mass region 120–135 GeV, using the existing LHC constraints, the observed local significances for  $m_H = 125 \text{ GeV}$  are 2.7 $\sigma$  for CDF [14], 1.1 $\sigma$  for D0 [15] and 2.8 $\sigma$  for their combination [16].

The previous ATLAS searches in  $4.6\text{--}4.8 \text{ fb}^{-1}$  of data at  $\sqrt{s} = 7 \text{ TeV}$  are combined here with new searches for  $H \rightarrow ZZ^{(*)} \rightarrow 4\ell$ ,  $H \rightarrow \gamma\gamma$  and  $H \rightarrow WW^{(*)} \rightarrow \ell\nu\ell\nu$  in the  $5.8\text{--}5.9 \text{ fb}^{-1}$  of pp collision data taken at  $\sqrt{s} = 8 \text{ TeV}$  between April and June 2012. The data were recorded with instantaneous luminosities up to  $6.8 \times 10^{34} \text{ cm}^{-2} \text{ s}^{-1}$ ; they are therefore affected by multiple pp collisions occurring in the same or neighbouring bunch crossings (pile-up). In the 7 TeV data, the average number of interactions per bunch crossing was approximately 10; the average increased to approximately 20 in the 8 TeV data. The reconstruction, identification and isolation criteria used for electrons and photons in the 8 TeV data are improved, making the  $H \rightarrow ZZ^{(*)} \rightarrow 4\ell$  and  $H \rightarrow \gamma\gamma$  searches more robust against the increased pile-up. These analyses were re-optimised with simulation and frozen before looking at the 8 TeV data.

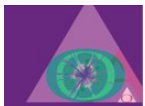
In the  $H \rightarrow WW^{(*)} \rightarrow \ell\nu\ell\nu$  channel, the increased pile-up deteriorates the event missing transverse momentum,  $E_T^{\text{miss}}$ , resolution, which results in significantly larger Drell-Yan background in the same-flavour final states. Since the  $\nu\bar{\nu}$  channel provides most of the sensitivity of the search, only this final state is used in the analysis of the 8 TeV data. The kinematic region is used in the SM Higgs boson with a mass between 110 GeV and 140 GeV is

<sup>a</sup> © CERN for the benefit of the ATLAS Collaboration.  
<sup>\*</sup> E-mail address: atlas.publications@cern.ch.

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http://dx.doi.org/10.1016/j.physletb.2012.08.020

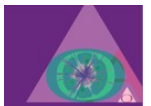
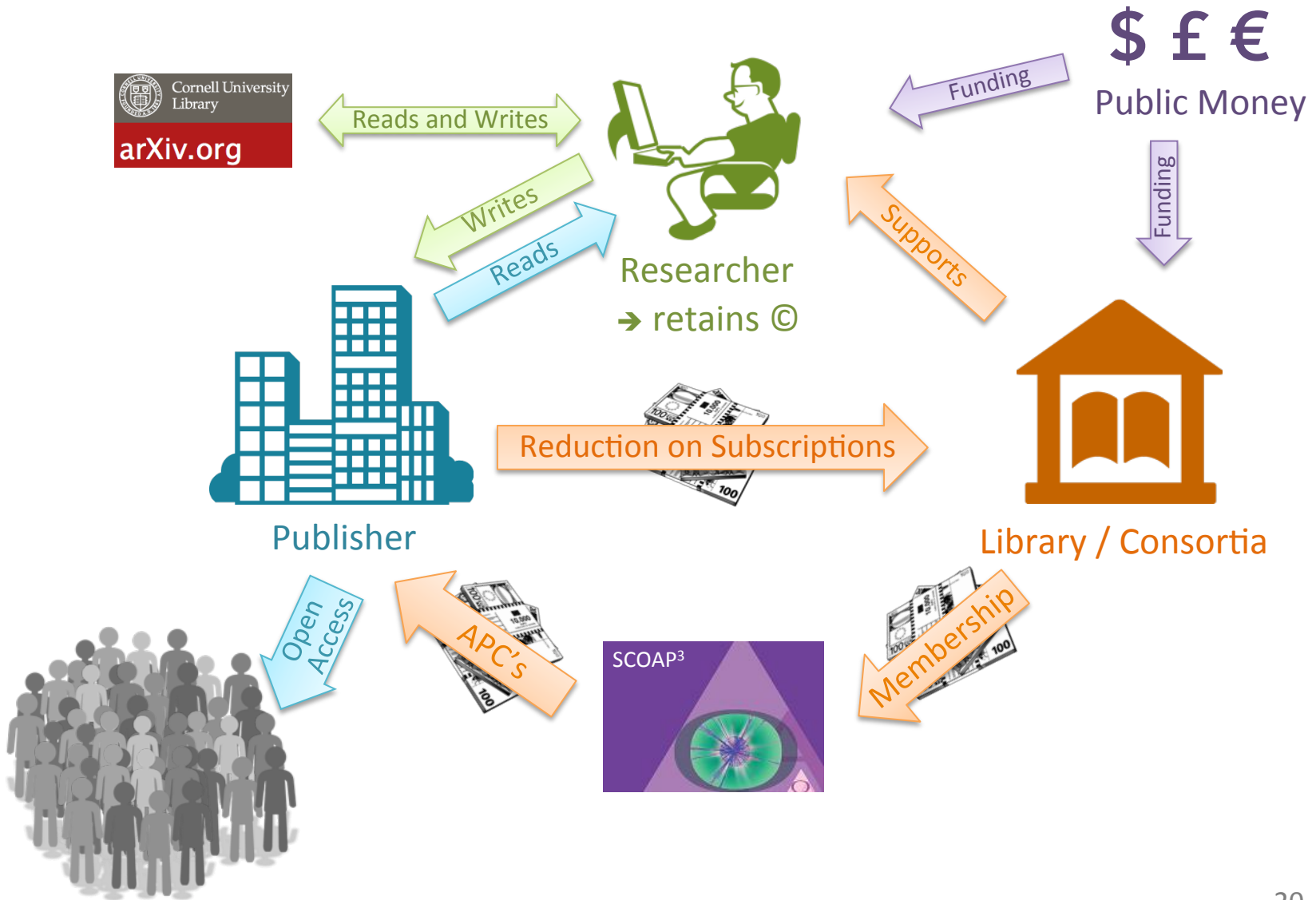
<sup>†</sup> The symbol  $\ell$  stands for electron or muon.

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# The SCOAP<sup>3</sup> Business Model

Redirecting existing subscriptions to support Open Access

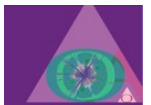




# History, Business Model and Operations

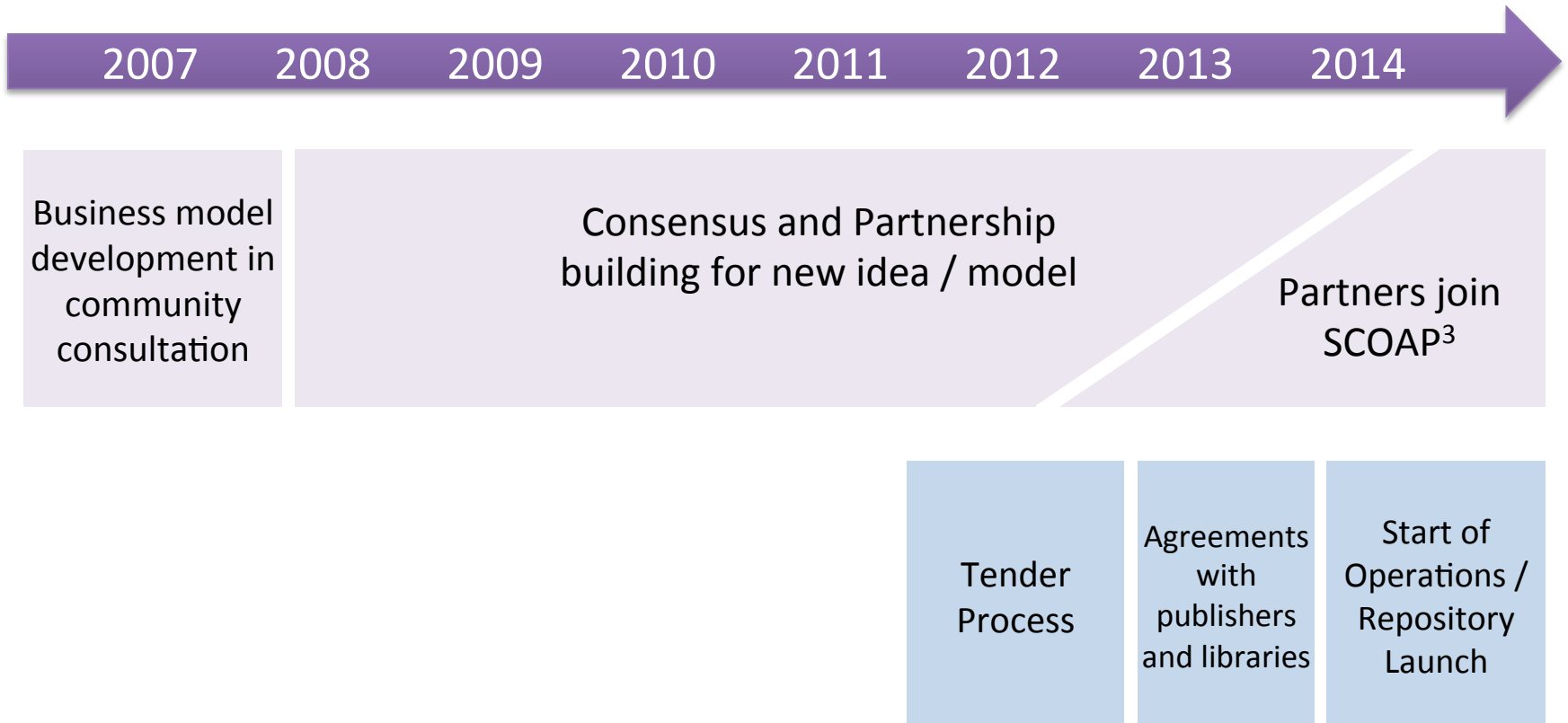
## Agenda

- 1 Why SCOAP<sup>3</sup> ?
- 2 A Brief Look To The Past
- 3 Tendering Process & APCs
- 4 Partnership & Governance



# A Brief Look To The Past

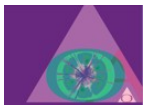
The way to a successful launch in 2014



# History, Business Model and Operations

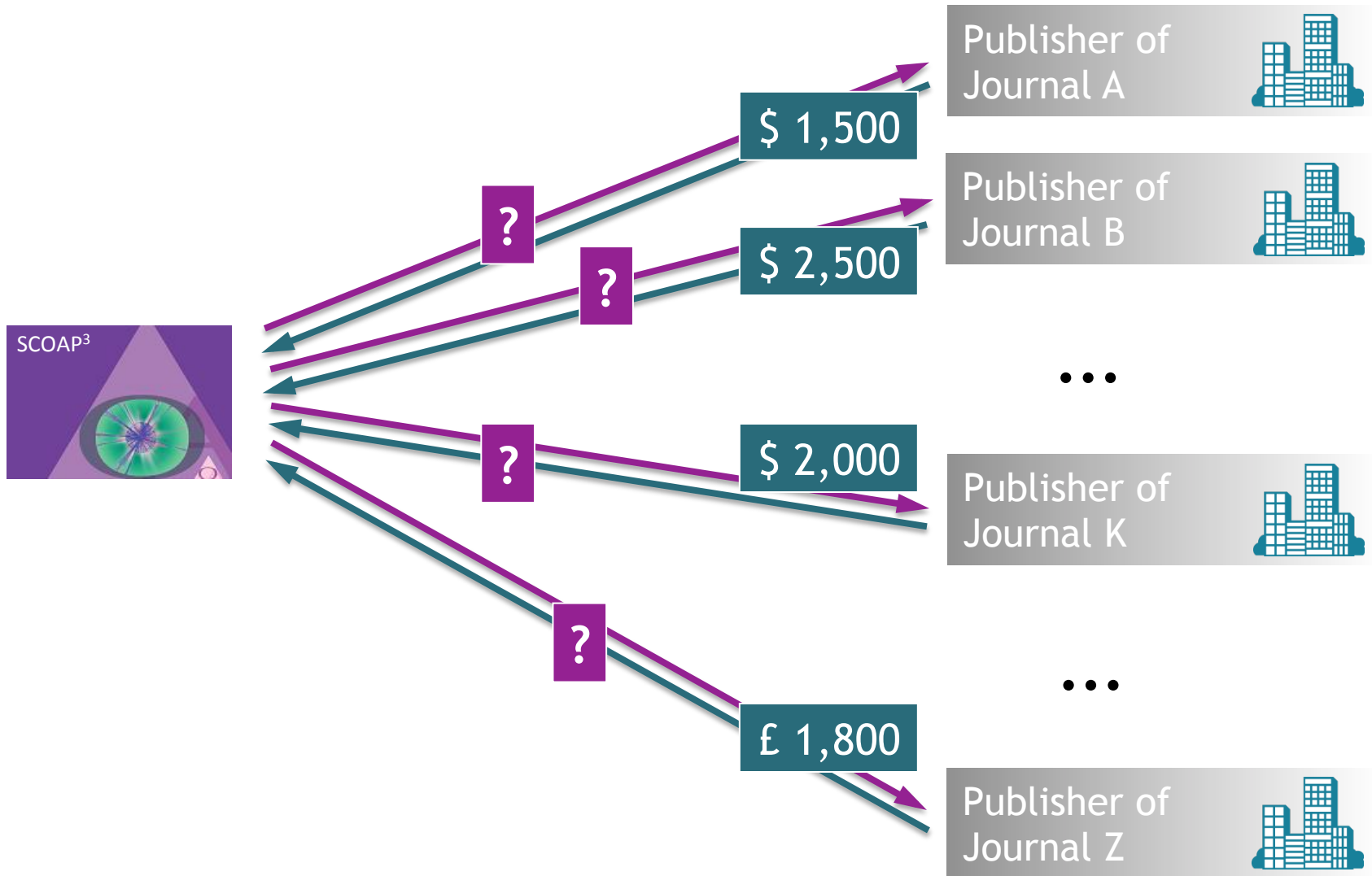
## Agenda

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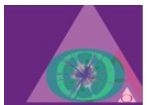


# The SCOAP<sup>3</sup> Tender Process

Three steps to determine the “best value for money”



Fictive numbers for explanation only!

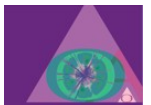


# The SCOAP<sup>3</sup> Tender Process (cont'd)

Three steps to determine the “best value for money”



Fictive numbers for explanation only!



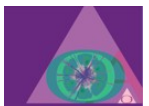
# The SCOAP<sup>3</sup> Tender Process (cont'd)

Three steps to determine the “best value for money”



	Journal	Price	Volume	Contract	Expenditure
Ranked by (high) quality and (low) price	Journal K	\$ 2,000	1,100	\$ 2.2mn	€ 1.8mn
	Journal A	\$ 1,500	2,000	\$ 3.0mn	€ 4.2mn
	Journal Z	£ 1,800	800	£ 1.4mn	€ 5.9mn
	Journal F	€ 4,000	300	€ 1.2mn	€ 7.1mn
	Journal L	€ 2,000	700	€ 1.4mn	€ 8.5mn
	Journal R	€ 1,800	650	€ 1.2mn	€ 9.7mn
	Journal Q	£ 3,000	90	£ 0.3mn	€ 10.0mn
	Journal P	\$ 800	120		
	Journal W	£ 5,000	100		
		...	...	...	



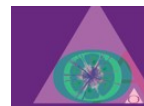
Fictive numbers for explanation only!



# SCOAP<sup>3</sup> Tender Results in alphabetical order

Publisher 	Journal 	SCOAP <sup>3</sup> share 2011	APC	SCOAP <sup>3</sup> articles 2011	# articles Nov 2014
APS	Physical Review D	ALL	\$1,900	2,989	
APS	Physical Review C	9.9%	\$1,900	107	
Elsevier	Nuclear Physics B	ALL	\$2,000	284	289
Elsevier	Physics Letters B	ALL	\$1,800	1,010	800
Hindawi	AHEP	ALL	\$1,000	28	183
IOPp/DPG	New Journal of Physics	2.7%	£1,200	20	5
IOPp/SISSA	JCAP	30.9%	£1,400	138	209
IOPp/CAS	Chinese Physics C	7.2%	£1,000	16	17
Jagellonian	Acta Physica Polonica B	22.1%	€ 500	32	10
Springer/SISSA	Journal of HEP	ALL	€ 1,200	1,652	1,747
Springer/SIF	European Physical J. C	ALL	€ 1,500	326	466
OUP/JPS	PTEP	36.2%	£ 1,000	46	52
		<b>Average</b>	<b>€ 1,311</b>	<b>3,552</b>	<b>3,778</b>

Journals not listed either did not participate or the quality/price did not fit the €10mn budget envelope. See more details under: <http://scoap3.org/scoap3journals/journals-apc>



# APCs For Gold OA Correlate with Impact Factor

SCOAP<sup>3</sup> APCs reflect quality-price correlation in the Gold OA market



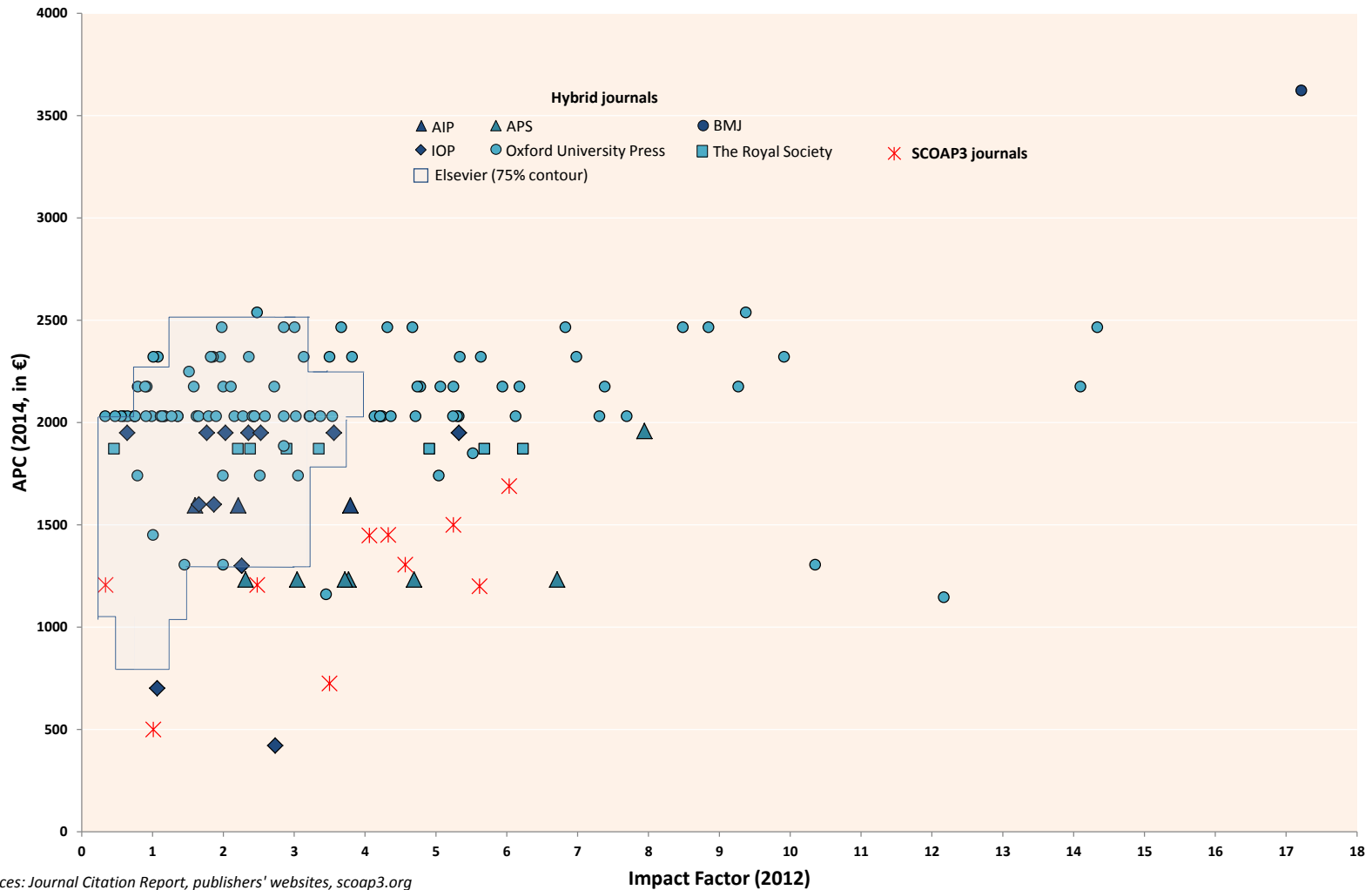
C. Romeu et al. (2014) *The SCOAP3 initiative and the Open Access - Article-Processing-Charge market: global partnership and competition improve value in the dissemination of science* DOI: 10.2314/CERN/C26P.W9DT





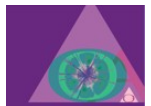
# APCs For Hybrid Journals

SCOAP<sup>3</sup> journals offer better “value for money”



Sources: Journal Citation Report, publishers' websites, scoap3.org

C. Romeu et al. (2014) *The SCOAP3 initiative and the Open Access - Article-Processing-Charge market: global partnership and competition improve value in the dissemination of science* DOI: 10.2314/CERN/C26P.W9DT



# History, Business Model and Operations

## Agenda

- 1 Why SCOAP<sup>3</sup> ?
- 2 A Brief Look To The Past
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# The SCOAP<sup>3</sup> Business Model

Redirecting existing subscription money



Publisher

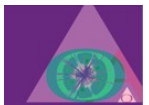
Reduction on Subscriptions

- Price of package reduced according to SCOAP<sup>3</sup> content
- Contracts adjusted for subscribers worldwide
- Refunds/credits for 2014



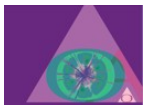
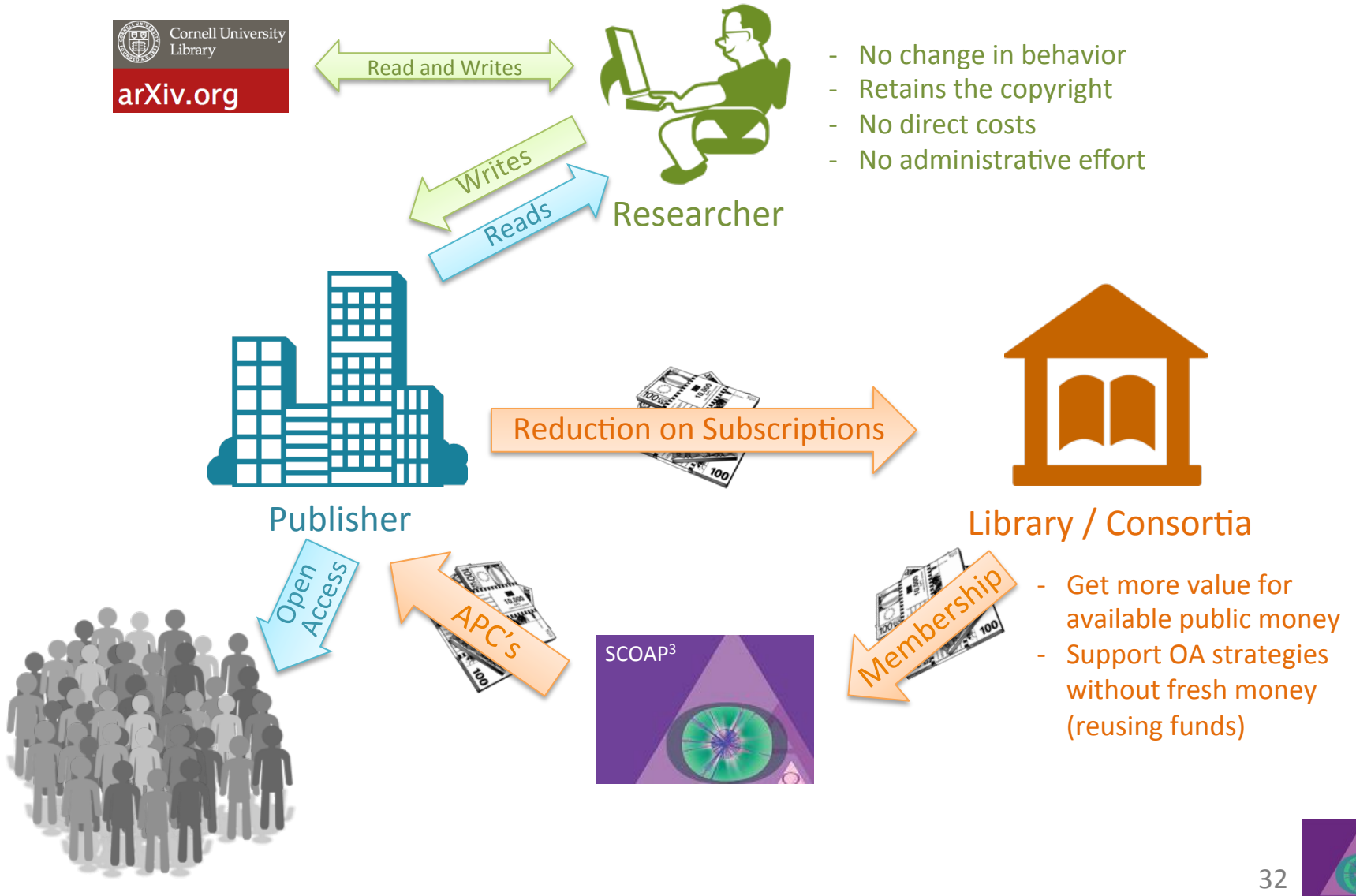
Library / Consortia

- Get more value for available public money
- Support OA strategies without fresh money (reusing funds)



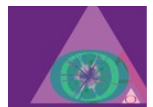
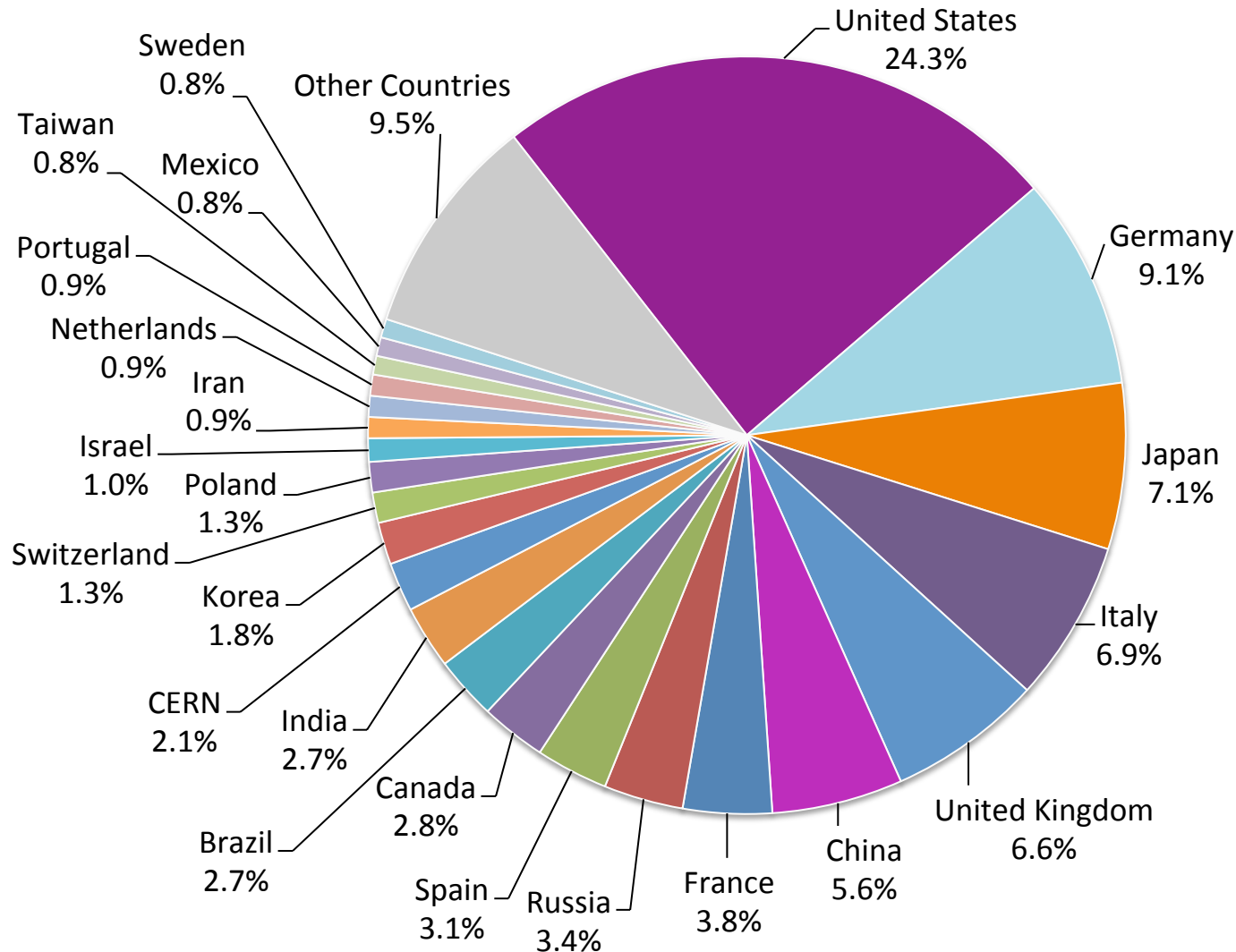
# The SCOAP<sup>3</sup> Business Model

Redirecting existing subscription money

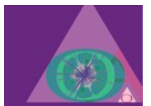
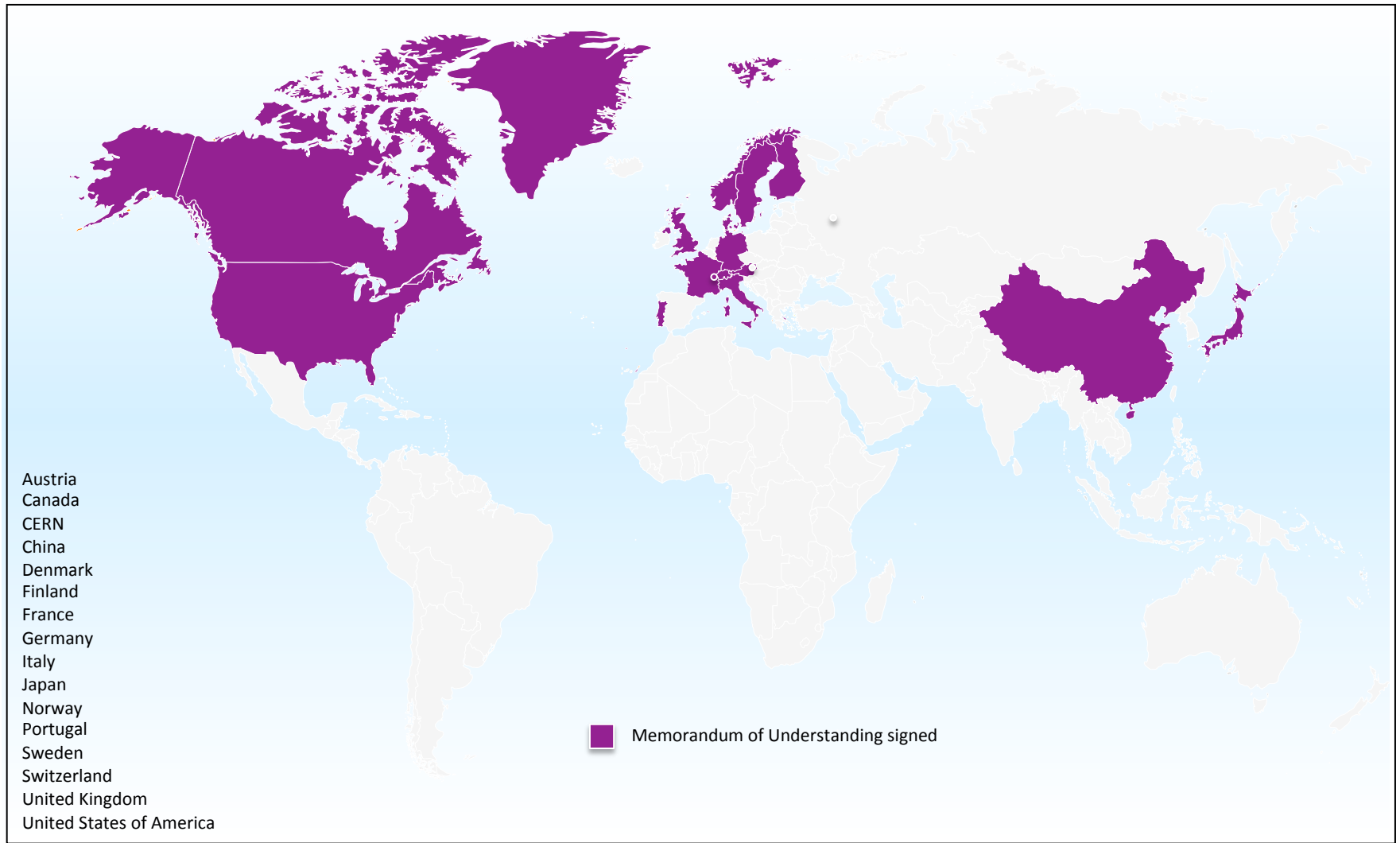


# SCOAP<sup>3</sup> budget: € 5,000,000/year

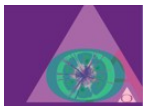
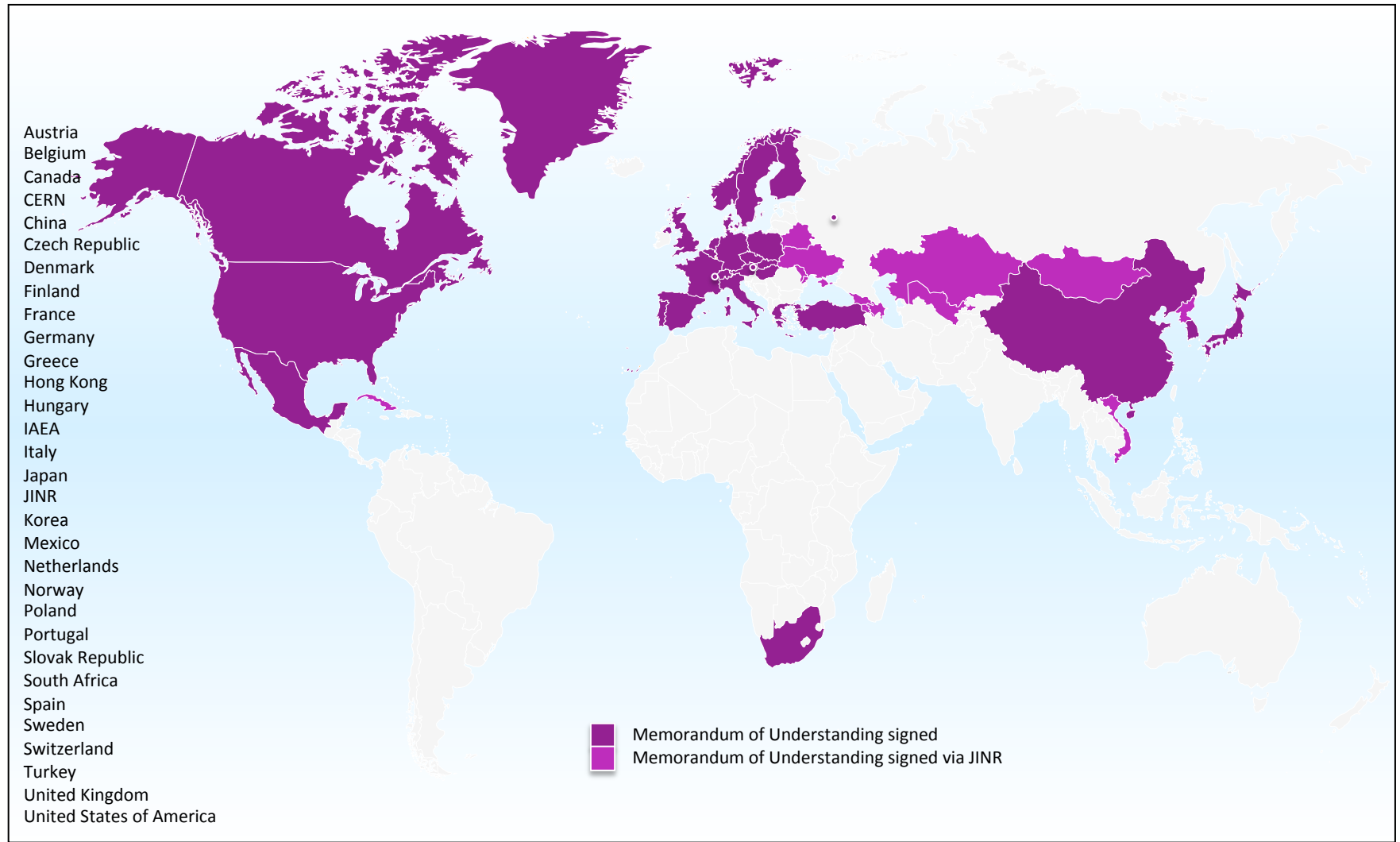
Partners contribute based on national share of HEP publications



# SCOAP<sup>3</sup> Partners by end 2013

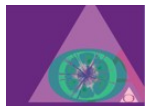
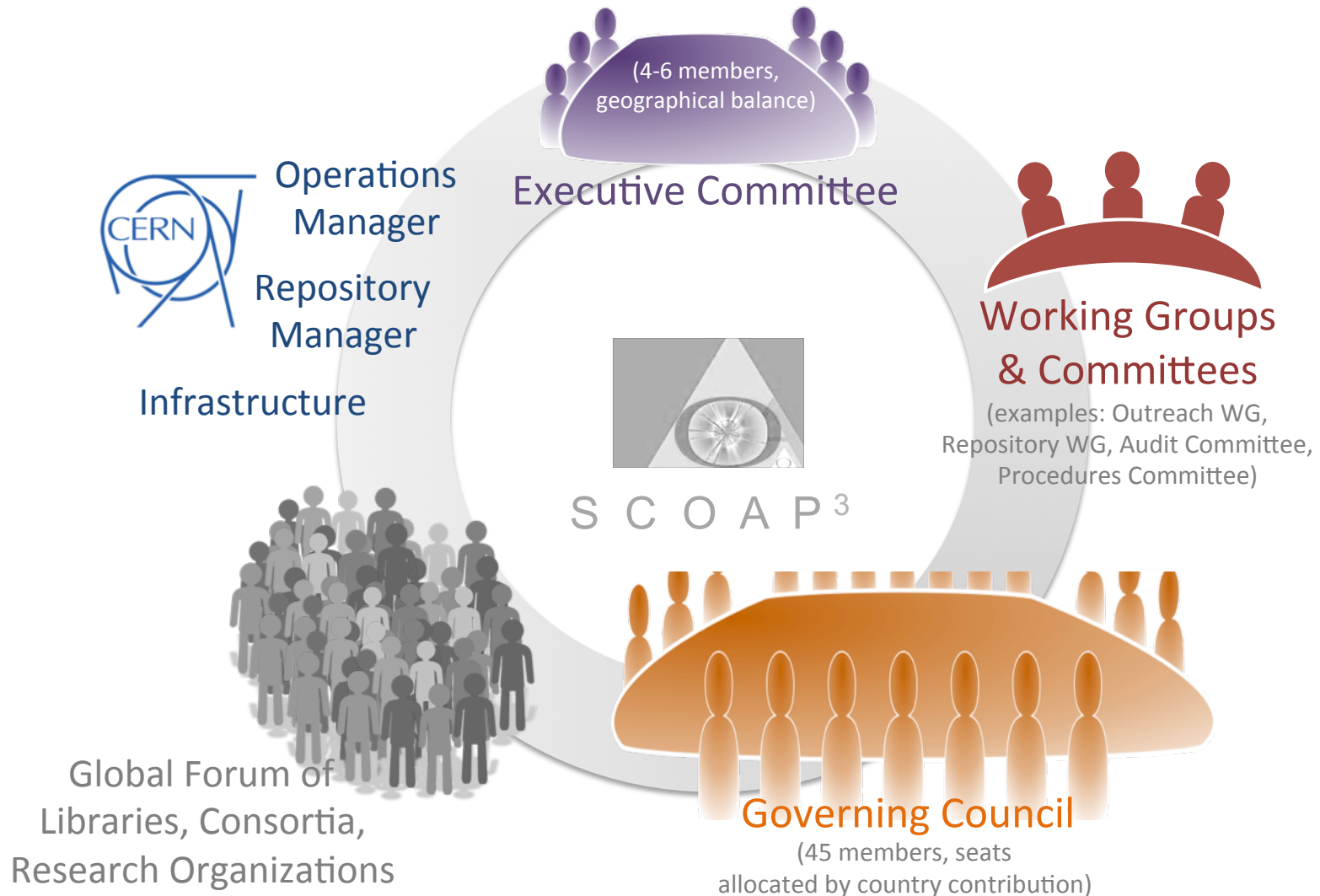


# SCOAP<sup>3</sup> Partners as of November 2014



# Governance Structure

Global participation for transparency and good governance





# Governance Structure (cont'd)

SCOAP<sup>3</sup> global team



Chair:

Dr. Ralf Schimmer (Germany)

Deputy Chair:

Ivy Anderson (USA)

Executive Committee:

Clare Appavoo (Canada)

Ivy Anderson (USA)

Dr. Jun Adachi (Japan)

Nina Karlstrøm (Norway)

Dr. Salvatore Mele (CERN)

Dr. Stefano Bianco (Italy)

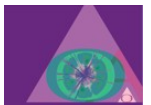


Operations Manager:

Alexander Kohls (CERN)

Repository Manager:

Wojciech Ziótek (CERN)

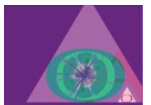


# History, Business Model and Operations

## Questions & Answers

Questions?

You can find further information and a record of this webinar on our homepage: <http://scoap3.org>



# Repository Services

SCOAP<sup>3</sup> Webinar & Forum

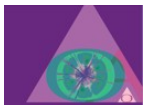
18 November 2014



# Repository Services

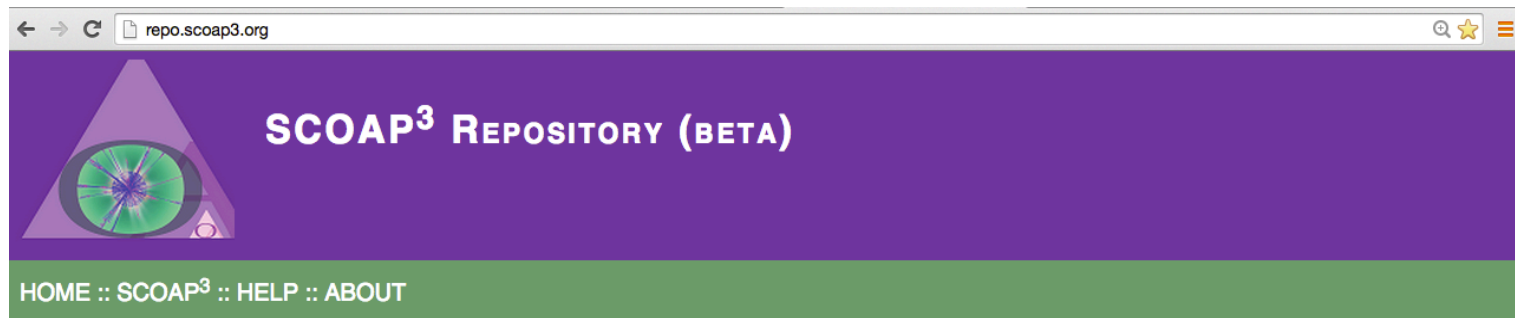
## Agenda

- 1 The Repository & How To Search
- 2 ORCID in SCOAP<sup>3</sup>
- 3 Beyond search: feeds and API
- 4 API Use Case: INFN Open Access Repository



# The SCOAP<sup>3</sup> Repository

Launched in February at [repo.scoap3.org](http://repo.scoap3.org) (Invenio based)



Search 3,808 records for:

any field  [Advanced Search](#)

affiliation  
author  
title  
doi  
orcid  
country

Narrow by journal or click on a journal to browse all articles:

- [Acta Physica Polonica B \(Jagiellonian University\)](#) (10)
- [Advances in High Energy Physics \(Hindawi\)](#) (183)
- [Chinese Physics C \(IOPP/CAS\)](#) (17)
- [European Physical Journal C \(Springer/SIF\)](#) (465)
- [Journal of Cosmology and Astroparticle Physics \(IOPP/SISSA\)](#) (208)
- [Journal of High Energy Physics \(Springer/SISSA\)](#) (1,766)
- [New Journal of Physics \(IOPP/DPG\)](#) (5)
- [Nuclear Physics B \(Elsevier\)](#) (289)
- [Physics Letters B \(Elsevier\)](#) (813)
- [Progress of Theoretical and Experimental Physics \(OUP/JPS\)](#) (52)

Welcome to the SCOAP<sup>3</sup> repository.

Here you can freely search, browse and of course download all Open Access articles sponsored by the international SCOAP<sup>3</sup> initiative.

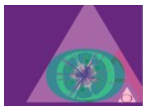
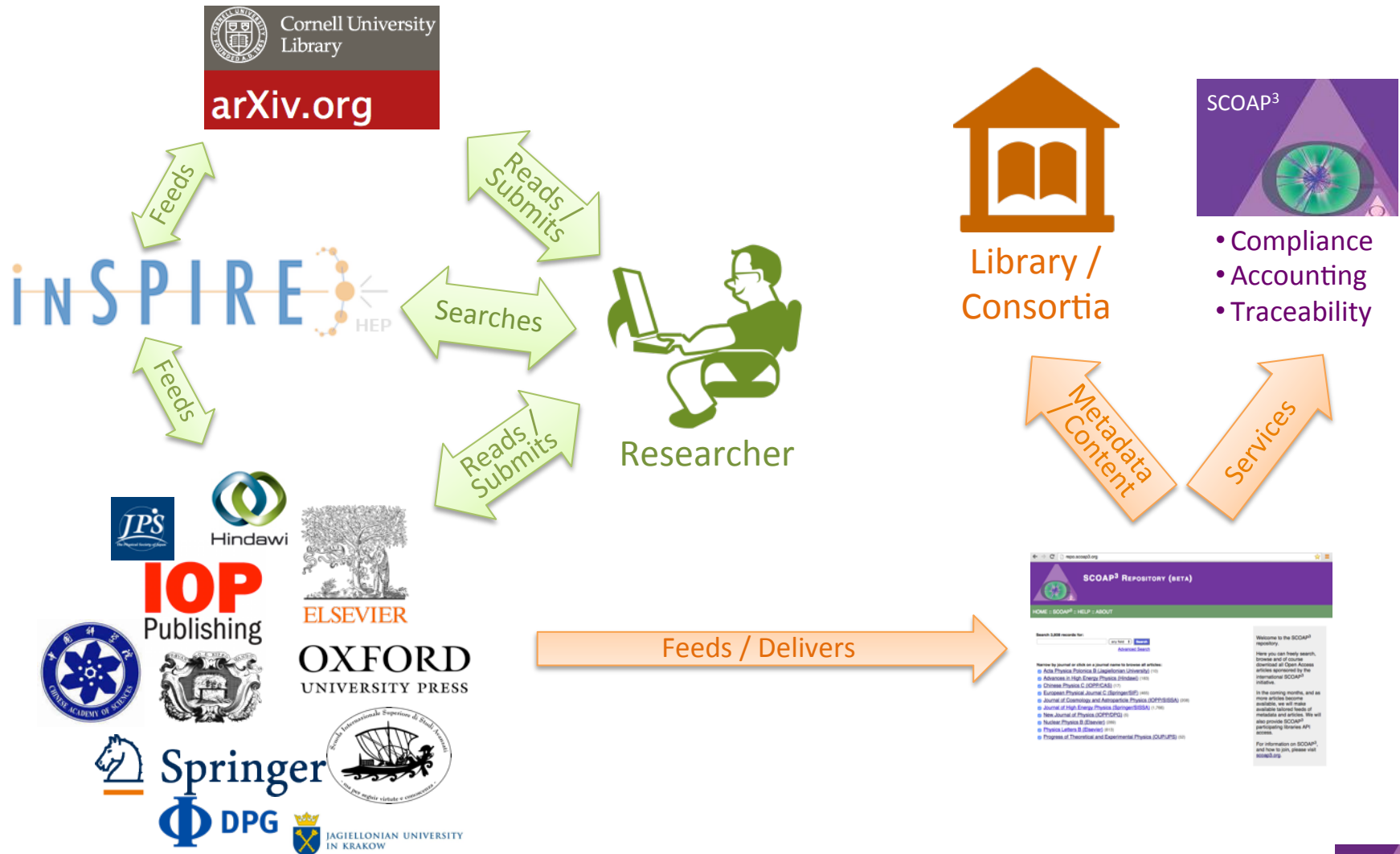
In the coming months, and as more articles become available, we will make available tailored feeds of metadata and articles. We will also provide SCOAP<sup>3</sup> participating libraries API access.

For information on SCOAP<sup>3</sup>, and how to join, please visit [scoap3.org](http://scoap3.org).



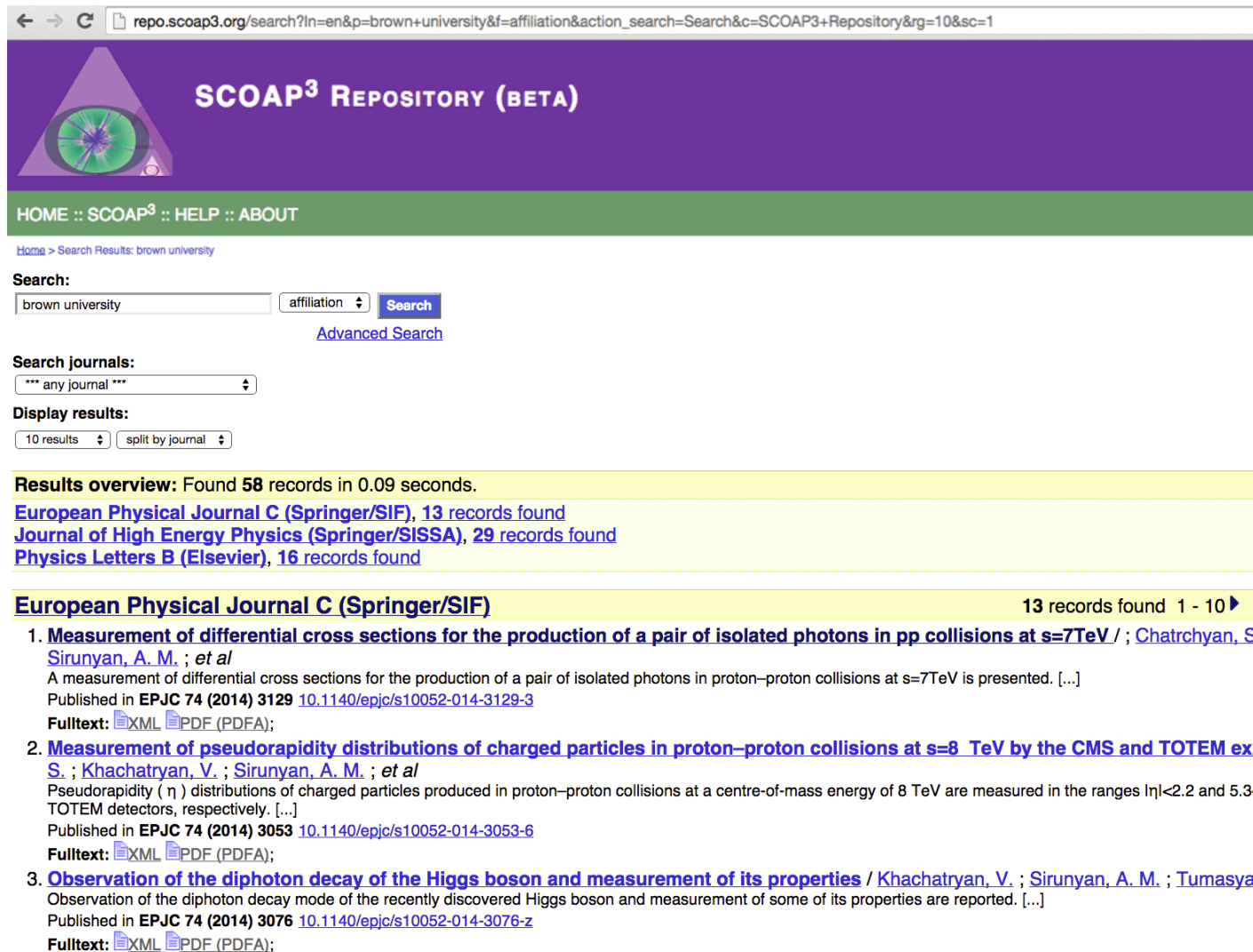
# The SCOAP<sup>3</sup> Repository – A tool for participating libraries

Open metadata, feeds and content to build services. SCOAP<sup>3</sup> compliance monitoring



# Searching the SCOAP<sup>3</sup> Repository

How to select articles from a given country or institution?



The screenshot shows the SCOAP<sup>3</sup> Repository (BETA) search interface. The browser address bar contains the URL: `repo.scoap3.org/search?ln=en&p=brown+university&f=affiliation&action_search=Search&c=SCOAP3+Repository&rg=10&sc=1`. The page header features the SCOAP<sup>3</sup> logo and navigation links: HOME :: SCOAP<sup>3</sup> :: HELP :: ABOUT. Below the header, the search results for 'brown university' are displayed. The search bar contains 'brown university' and the filter is set to 'affiliation'. The search results overview shows 58 records found in 0.09 seconds. The results are categorized by journal: European Physical Journal C (Springer/SIF) with 13 records, Journal of High Energy Physics (Springer/SISSA) with 29 records, and Physics Letters B (Elsevier) with 16 records. The first result is highlighted, showing the title 'Measurement of differential cross sections for the production of a pair of isolated photons in pp collisions at s=7TeV / ; Chatrchyan, S Sirunyan, A. M. ; et al', published in EPJC 74 (2014) 3129. The second result is 'Measurement of pseudorapidity distributions of charged particles in proton-proton collisions at s=8 TeV by the CMS and TOTEM experiments ; Khachatryan, V. ; Sirunyan, A. M. ; et al', published in EPJC 74 (2014) 3053. The third result is 'Observation of the diphoton decay of the Higgs boson and measurement of its properties / Khachatryan, V. ; Sirunyan, A. M. ; Tumasyan', published in EPJC 74 (2014) 3076. Each result includes a 'Fulltext' link with XML and PDF (PDF/A) options.

repo.scoap3.org/search?ln=en&p=brown+university&f=affiliation&action\_search=Search&c=SCOAP3+Repository&rg=10&sc=1

**SCOAP<sup>3</sup> REPOSITORY (BETA)**

HOME :: SCOAP<sup>3</sup> :: HELP :: ABOUT

Home > Search Results: brown university

**Search:**  
brown university    affiliation    **Search**  
[Advanced Search](#)

**Search journals:**  
\*\*\* any journal \*\*\*

**Display results:**  
10 results    split by journal

**Results overview:** Found 58 records in 0.09 seconds.

[European Physical Journal C \(Springer/SIF\)](#), 13 records found  
[Journal of High Energy Physics \(Springer/SISSA\)](#), 29 records found  
[Physics Letters B \(Elsevier\)](#), 16 records found

**European Physical Journal C (Springer/SIF)** 13 records found 1 - 10 ▶

- Measurement of differential cross sections for the production of a pair of isolated photons in pp collisions at s=7TeV / ; Chatrchyan, S Sirunyan, A. M. ; et al**  
A measurement of differential cross sections for the production of a pair of isolated photons in proton-proton collisions at s=7TeV is presented. [...]  
Published in **EPJC 74 (2014) 3129** [10.1140/epjc/s10052-014-3129-3](https://doi.org/10.1140/epjc/s10052-014-3129-3)  
**Fulltext:** [XML](#) [PDF \(PDF/A\)](#);
- Measurement of pseudorapidity distributions of charged particles in proton-proton collisions at s=8 TeV by the CMS and TOTEM experiments ; Khachatryan, V. ; Sirunyan, A. M. ; et al**  
Pseudorapidity ( $\eta$ ) distributions of charged particles produced in proton-proton collisions at a centre-of-mass energy of 8 TeV are measured in the ranges  $|\eta| < 2.2$  and 5.3-6.0 for the CMS and TOTEM detectors, respectively. [...]  
Published in **EPJC 74 (2014) 3053** [10.1140/epjc/s10052-014-3053-6](https://doi.org/10.1140/epjc/s10052-014-3053-6)  
**Fulltext:** [XML](#) [PDF \(PDF/A\)](#);
- Observation of the diphoton decay of the Higgs boson and measurement of its properties / Khachatryan, V. ; Sirunyan, A. M. ; Tumasyan**  
Observation of the diphoton decay mode of the recently discovered Higgs boson and measurement of some of its properties are reported. [...]  
Published in **EPJC 74 (2014) 3076** [10.1140/epjc/s10052-014-3076-z](https://doi.org/10.1140/epjc/s10052-014-3076-z)  
**Fulltext:** [XML](#) [PDF \(PDF/A\)](#);



# Searching the SCOAP<sup>3</sup> Repository

## Affiliations and countries as starting points for extracting records

### Examples: Searching by country

*Country of affiliation extracted\* from publishers' feeds*

#### Example 1

Search:

[Advanced Search](#)

Returns all records where at least one author is affiliated to a German Institute.

#### Example 2

Search:

[Advanced Search](#)

Returns all records with at least one author affiliated to a German Institute and one to a French institute.

\*Country extracted from the last string (comma separated) in the affiliation provided by the publisher; normalized to standard English country name or abbreviation.

### Example: Advanced Search

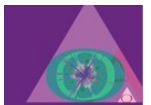
#### Example 3

Search:

[Simple Search](#)

Returns all records with authors from Cambridge (not the U.S. one)

▶ NB Information on “Corresponding Author” is not available.

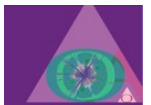




# Repository Services

## Agenda

- 1 The Repository & How To Search
- 2 ORCID in SCOAP<sup>3</sup>
- 3 Beyond search: feeds and API
- 4 API Use Case: INFN Open Access Repository



# ORCID – tool for libraries to extract relevant data

Known ORCID's are fed by publishers and displayed in the repository

SCOAP<sup>3</sup> REPOSITORY (BETA)

HOME :: SCOAP<sup>3</sup> :: HELP :: ABOUT

Home > Advances in High Energy Physics (Hindawi) > Probing the Top Quark Flavour-Changing Neutral Current at a Future Electron-Positron Collider

## Probing the Top Quark Flavour-Changing Neutral Current at a Future Electron-Positron Collider

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03 November 2014

**Abstract:** We present a study to examine the sensitivity of a future  $e^-e^+$  collider to the anomalous top flavour-changing neutral current (FCNC) to the gluon. To separate signal from background a multivariate analysis is performed on top quark pair and background events, where one top quark is considered to follow the dominant standard model (SM) decay,  $t \rightarrow Wb$ , and the other top decays through FCNC,  $t \rightarrow qg$ , where  $q$  is a  $u$ - or a  $c$ -quark. The analysis of fully hadronic FCNC decay of the  $t\bar{t}$  pair is also presented. The 95% confidence level limits on the top quark anomalous couplings are obtained for different values of the center-of-mass energies and integrated luminosities.

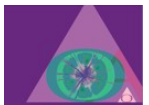
**Published in:** *Advances in High Energy Physics* 2014 (2014) 476490  
**Published by:** Hindawi Publishing Corporation  
**DOI:** [10.1155/2014/476490](https://doi.org/10.1155/2014/476490)  
**License:** [CC-BY-3.0](https://creativecommons.org/licenses/by/3.0/)

Fulltext:  
[XML](#) [PDF](#) [PDF \(PDF/A\)](#)

Already 7.1% of articles and 1.4% of authors with ORCID's in the repository

Large growth to be expected: publishers not yet capturing authors ORCID's

SCOAP3 partners can promote ORCID's with their authors, and later query the repository.



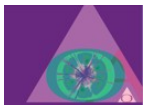
# ORCID<sup>3</sup> in the SCOAP<sup>3</sup> Repository (cont'd)

Search for ORCID already enabled



The screenshot shows the SCOAP<sup>3</sup> Repository (BETA) website. The browser address bar shows 'repo.scoap3.org'. The page header includes a logo and navigation links: HOME :: SCOAP<sup>3</sup> :: HELP :: ABOUT. A search bar contains the ORCID number '0000-0003-4629-6612' and a dropdown menu set to 'orcid'. A 'Search' button is visible, along with a link to 'Advanced Search'. Below the search bar, there are options for 'Search journals:' (set to '\*\*\* any journal \*\*\*') and 'Display results:' (set to '10 results' and 'split by journal'). A yellow banner indicates 'Results overview: Found 3 records in 0.12 seconds.' and a link to 'Nuclear Physics B (Elsevier), 3 records found'. The main content area is titled 'Nuclear Physics B (Elsevier)' and shows '3 records found'. Three search results are listed:

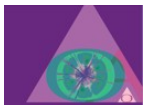
- 1. Integrable anyon chains: From fusion rules to face models to effective field theories** / Finch, Peter E. ; Flohr, Michael ; Frahm, Holger  
Starting from the fusion rules for the algebra  $SO(5)_2$  we construct one-dimensional lattice models of interacting anyons with commuting transfer matrices of 'interactions round the face' (IRF) type. [...]  
Published in **Nuclear Physics B** 889 (2014) 299-332 [10.1016/j.nuclphysb.2014.10.017](https://doi.org/10.1016/j.nuclphysb.2014.10.017)  
Fulltext: [PDF](#) [XML](#);
- 2. Inversion identities for inhomogeneous face models** / Frahm, Holger ; Karaiskos, Nikos  
We derive exact inversion identities satisfied by the transfer matrix of inhomogeneous interaction-round-a-face (IRF) models with arbitrary boundary conditions using the underlying integrable structure and crossing properties of the local Boltzmann weights. [...]  
Published in **Nuclear Physics B** 887 (2014) 423-440 [10.1016/j.nuclphysb.2014.08.013](https://doi.org/10.1016/j.nuclphysb.2014.08.013)  
Fulltext: [XML](#) [PDF](#) [PDF \(PDF/A\)](#);
- 3. The staggered six-vertex model: Conformal invariance and corrections to scaling** / Frahm, Holger ; Seel, Alexander  
We study the emergence of non-compact degrees of freedom in the low energy effective theory for a class of  $\mathbb{Z}_2$ -staggered six-vertex models. [...]  
Published in **Nuclear Physics B** 879 (2014) 382-406 [10.1016/j.nuclphysb.2013.12.015](https://doi.org/10.1016/j.nuclphysb.2013.12.015)  
Fulltext: [XML](#) [PDF](#) [PDF \(PDF/A\)](#);



# Repository Services

## Agenda

- 1 The Repository & How To Search
- 2 ORCID in SCOAP<sup>3</sup>
- 3 Beyond search: feeds and API
- 4 API Use Case: INFN Open Access Repository



# Extraction of relevant records, content, metadata

Two options already supported



OAI-PMH standard (Open Archives Initiative Protocol for Metadata Harvesting)

- Formats: DublinCore, MARCXML
- Connector: <http://repo.scoap3.org/oai2d>
- Sets: <http://repo.scoap3.org/oai2d?verb=ListSets> (global & for every journal)
- Documentation: <http://scoap3.org/scoap3-repository/oai-pmh-feed>



Search API to return arbitrary set of records from (complex) searches

- Formats: MARCXML
- Connection by HTTP request: <http://repo.scoap3.org/search?p=xxxxxx&of=xm>
  - **xxxxxx** => actual query (e.g. affiliation:Cambridge not country:USA)
  - **of=xm** => return XML format
- Documentation: <http://scoap3.org/scoap3-repository/xml-api>



# Repository Services

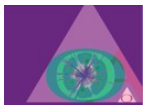
## Agenda

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# Italian National Institute of Nuclear Physics

Governmental Institute which promotes, coordinates and performs research in the field of sub-nuclear (particle), nuclear and astro-particle physics, as well as research and technological development necessary, in close collaboration with Universities, and in the context of international collaboration.



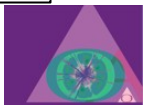
# The INFN Open Access Repository ([www.openaccessrepository.it](http://www.openaccessrepository.it))

The screenshot shows the website interface with the following elements:

- Header:** Open Access Repository logo, a "BETA" badge, the INVENIO logo, and a user login "barbera :: logout".
- Navigation:** Search, Submit, Personalize, Help, Administration.
- Search Section:** "Search 4,347 records for:" with a search box, "any field" dropdown, "Search" and "Browse" buttons, and links for "Search Tips" and "Advanced Search".
- Category List:**
  - Audio-Video Recordings (0) - INFN (0) Others (0)
  - Datasets (185) - INFN (185) Others (0)
  - Images (0) - INFN (0) Others (0)
  - Presentations (4) - INFN (3) PSTS (0) Others (1)
  - Posters (4) - INFN (4) Others (0)
  - Publications (3,968) - INFN (1,147) PSTS (1) Others (2,820)
  - Software (186) - INFN (186) Others (0)
- Right Column:** "ABOUT THIS SITE" (welcome message), "CERTIFICATION AND COMPLIANCE" (OpenDOAR, OpenAIRE), and "SEE ALSO" (INFN, PSTS).
- Footer:** Site navigation, "Powered by Invenio v1.1.3.15-fe13-dirty", "Maintained by INFN Catania", "Last updated: 20 Oct 2014, 14:03", language options, and logos for GIDP, eduGAIN, and Idem garr aai.

**Overlaid Annotations:**

- A purple box labeled "SCOAP<sup>3</sup>" is connected by arrows to "Cornell University Library" and "arXiv.org".
- A purple arrow labeled "papers" points from the SCOAP<sup>3</sup> box to the Cornell University Library logo.
- A purple arrow labeled "data" points from a cross-section image of a particle detector to the SCOAP<sup>3</sup> box.
- A green box labeled "REST API" is connected to the SCOAP<sup>3</sup> box.
- A clock icon labeled "Crontab" is also present.
- A logo for "EUDAT" is shown at the bottom.





# Automatic Ingestions of SCOAP<sup>3</sup> data

## Overview of technical implementation

Step 1

Call SCOAP<sup>3</sup> API

```
public static HttpMethod callIAPISCOAP3(String date, int jrec, int num_rec) {  
    HttpMethod method = null;  
    method = new GetMethod("http://repo.scoap3.org/search?of=xm&datecreated:" + date + "&jrec=" + jrec + "&rg=" + num_rec);  
    return method;  
}
```

*Connect to the SCOAP<sup>3</sup> HTTP endpoint and pull required information*

Step 2

Get SCOAP<sup>3</sup> records

```
public static void getRecordsScoop3(String date, int jrec, int num_rec) {  
    String responseXML = null;  
    HttpClient client = new HttpClient();  
    HttpMethod method = callIAPISCOAP3(date, jrec, num_rec);  
    try {  
        client.executeMethod(method);  
        if (method.getStatusCode() == HttpStatus.SC_OK) {  
            method.getResponseBody();  
            responseXML = convertStreamToString(method.getResponseBodyAsStream());  
            FileWriter fw = new FileWriter("MARCXML_SCOAP3_" + date + "/marcXML_scoap3_" + jrec + "_" + num_rec + ".xml");  
            fw.append(responseXML);  
            fw.close();  
        }  
    }  
}
```

*Save retrieved records in local XML file*

Step 3

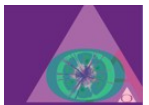
Format SCOAP<sup>3</sup> records

*Create compliance with Open Access Repository scheme (modify MarcXML tags)*

Step 4

Ingest final data

*Ingest final, reformatted data in Open Access Repository*



# Automatic Ingestions of SCOAP<sup>3</sup> data

## Summary and Conclusions

- ✓ The Open Access Repository (OAR) is a pilot data preservation and Open Access platform for INFN as well as other Italian organizations. The audience are both researchers and citizen scientists.
- ✓ The recently-released SCOAP<sup>3</sup> Repository RESTful API's enables straightforward fully-automated ingestion of SCOAP<sup>3</sup> resources.
- ✓ The ingestion of INFN (co-)authored papers and data from other highly reputed repositories is considered a very important functionality of INFN OAR: post-peer-review versions of articles are important for evaluation of research (from single researchers to entire research organisations), funding applications, and academical ranking, both at national and international level.
- ✓ The combination of the SCOAP<sup>3</sup> initiative for Open Access and the corresponding tools is a crucial service for our scientific community



### Questions?

You can find further information and a record of this webinar on our homepage: <http://scoap3.org>



# A Forward Look

SCOAP<sup>3</sup> Webinar & Forum

18 November 2014



# A Forward Look

2014 set up the operations, 2015 will target the next phase

2014

## Accomplishments in the First Phase

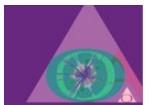
- Established and solidified operations
- Significantly expanded the partnership

2015

## Begin planning for the next phase 2017-2019 with many things to do:

- Assess progress to date
- Solicit the views of all partners and stakeholders:  
libraries & consortia / funding agencies / publishers
- Review journal growth
- Liaise with new journals that might have appeared in the meantime
- Reach out to other journals / publishers not part of the first phase

✧ Additionally, in 2015 we will continue to extend the partnership to more countries and libraries!



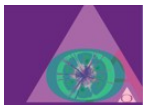
# A Forward Look

## Extending our achievements into the future

Phase 2 will build on the assets that we have successfully cultivated thus far:

- The commitment of CERN to host the initiative
- Robust governance structure with dedicated professionals from around the world
- Experience from the first tendering process (including reconciliation facility)
- Continuously growing global partnership
- Sound processes, workflows and technical solutions
- Strong partnership with the participating publishers

CERN, the Governing Council and the Executive Committee will soon develop a roadmap that will lead us into the second phase 2017-2019 in consultation with all parties and stakeholders

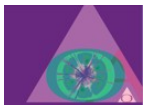


# A Forward Look

## Questions & Answers

### Questions?

You can find further information and a record of this webinar on our homepage: <http://scoap3.org>



# The SCOAP<sup>3</sup> Webinar & Forum

## Introduction

Thank you for your attention!

You can find further information and a record of this webinar as well as the presentation on our homepage: <http://scoap3.org/webinar2014>

