

# SCOAP<sup>3</sup>

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## Masterclass on Open Science and Publishing

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Université Claude Bernard



Lyon 1



# Publication Models (lightning overview)

without open access:

- \* **Subscription model** (Traditional)

with open access:

- \* **Green Open Access** (Self-archiving)
- \* **Gold Open Access**; special cases
  - **Diamond** (Platinum) Open Access
  - **Bronze** Open Access
- \* **Hybrid** (mixture between subscription model and OA)



# A (somewhat) different approach: SCOAP<sup>3</sup>

sometimes called: 'institutional gold open access'

'diamond open access for a discipline'

Sponsoring Consortium for Open Access Publishing in Particle Physics

starting point: Jan 2014

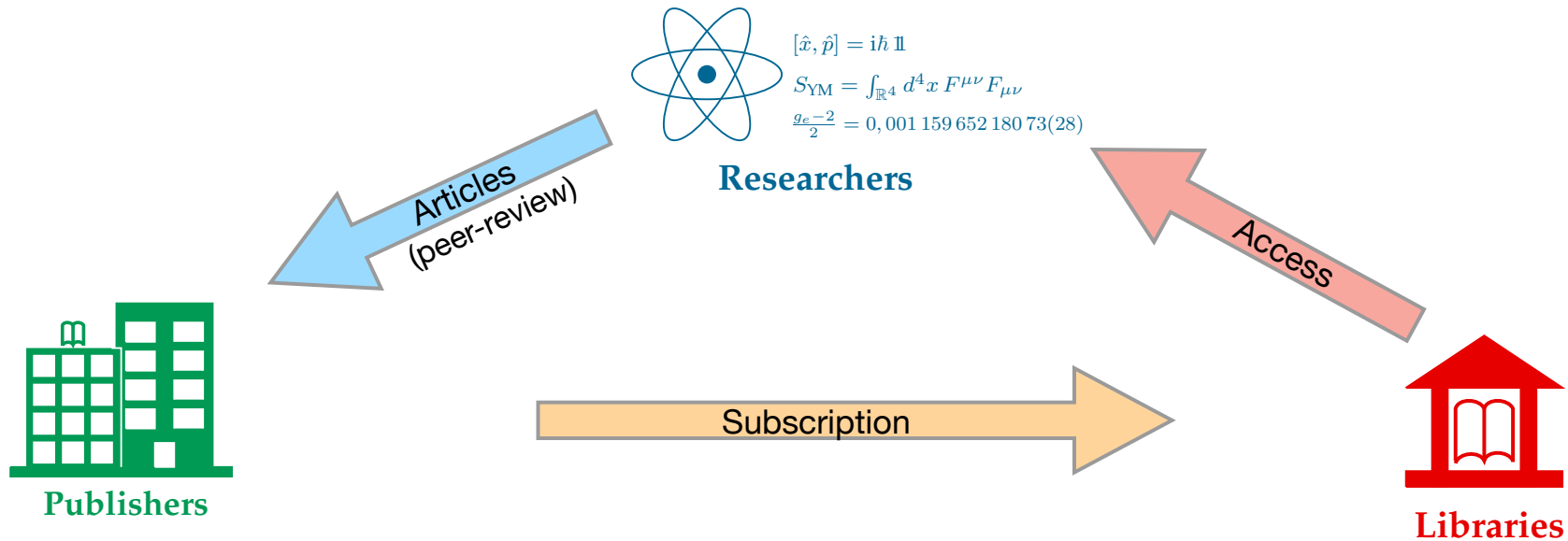
discipline: High Energy Physics (HEP), particle physics

around 7500 articles/year worldwide: 90% of all articles  
in the field (750 in France)

## **Mission Statement:**

A global consortium to convert Particle Physics articles in high-quality journals to Open Access, at no burden for authors, mostly re-using existing funds.

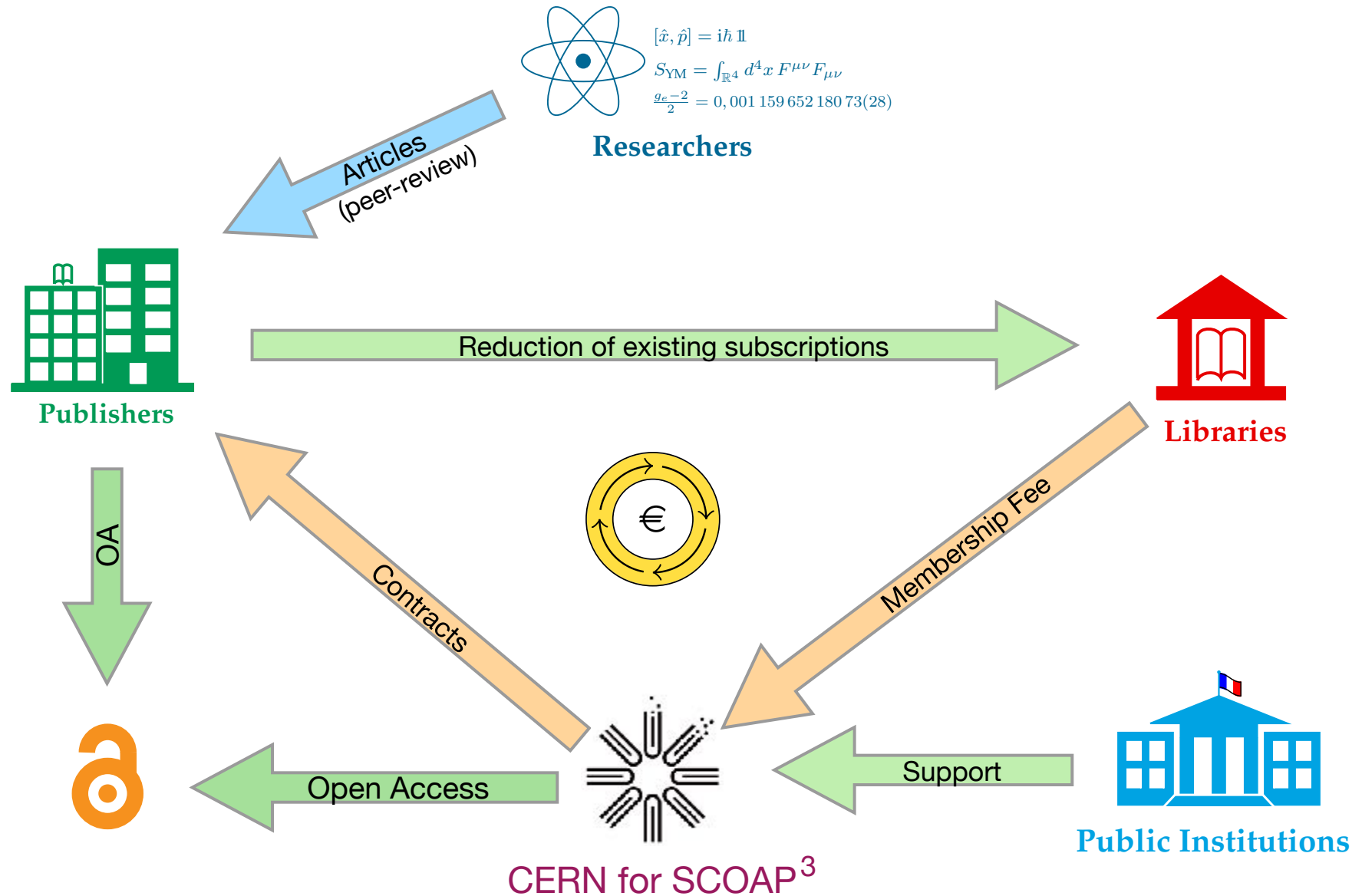
# Typical Subscription Model



## problems with this model:

- no open access  
pay to read; direct access limited to subscribed members only
- no possibility to control the costs  
individual/national contracts between publishers and libraries/institutions  
favourable conditions for publishers
- Copyright (mostly) **not** retained by author

# SCOAP<sup>3</sup> Model: Basic Idea

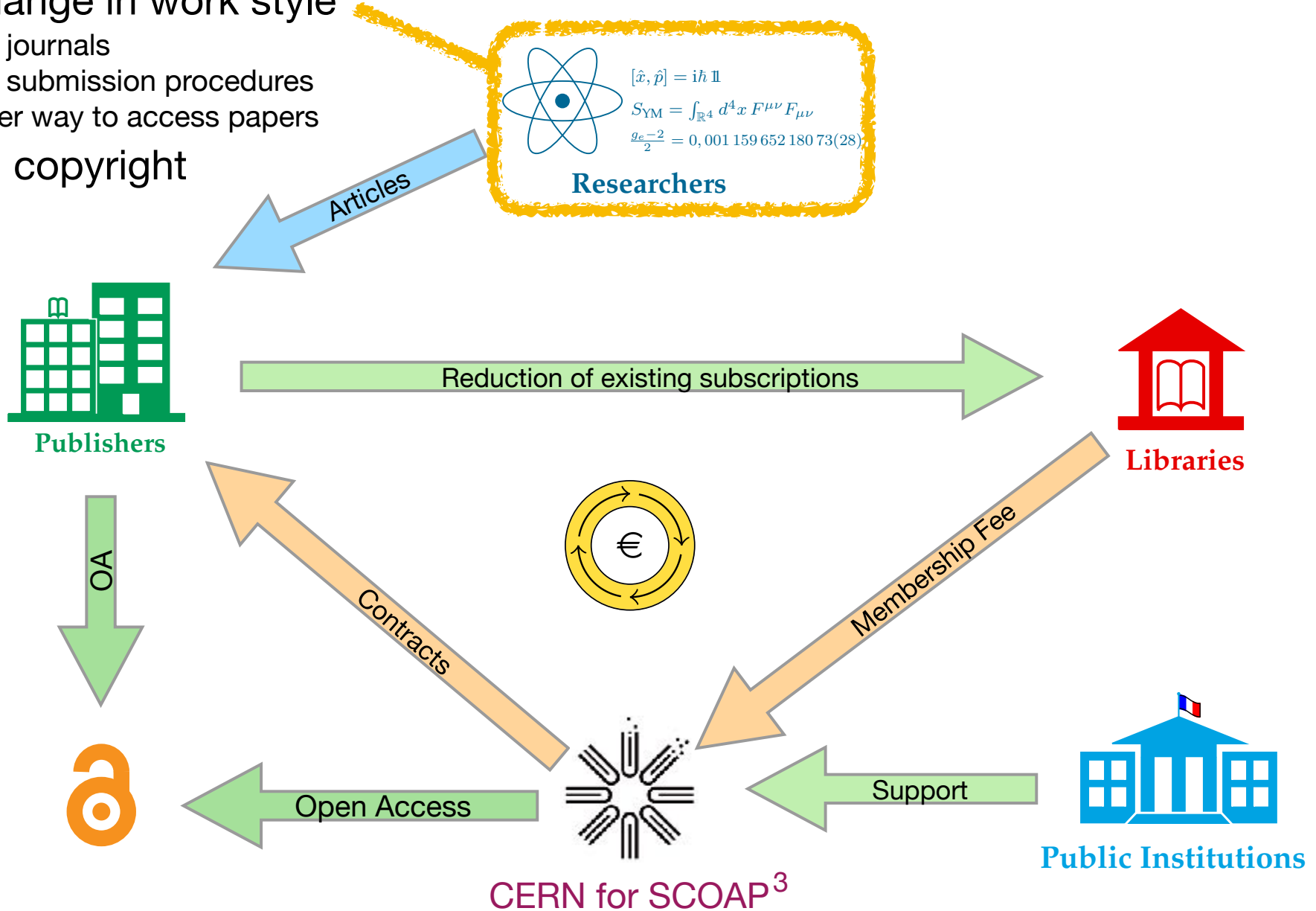


# SCOAP<sup>3</sup> Model: Main Benefits

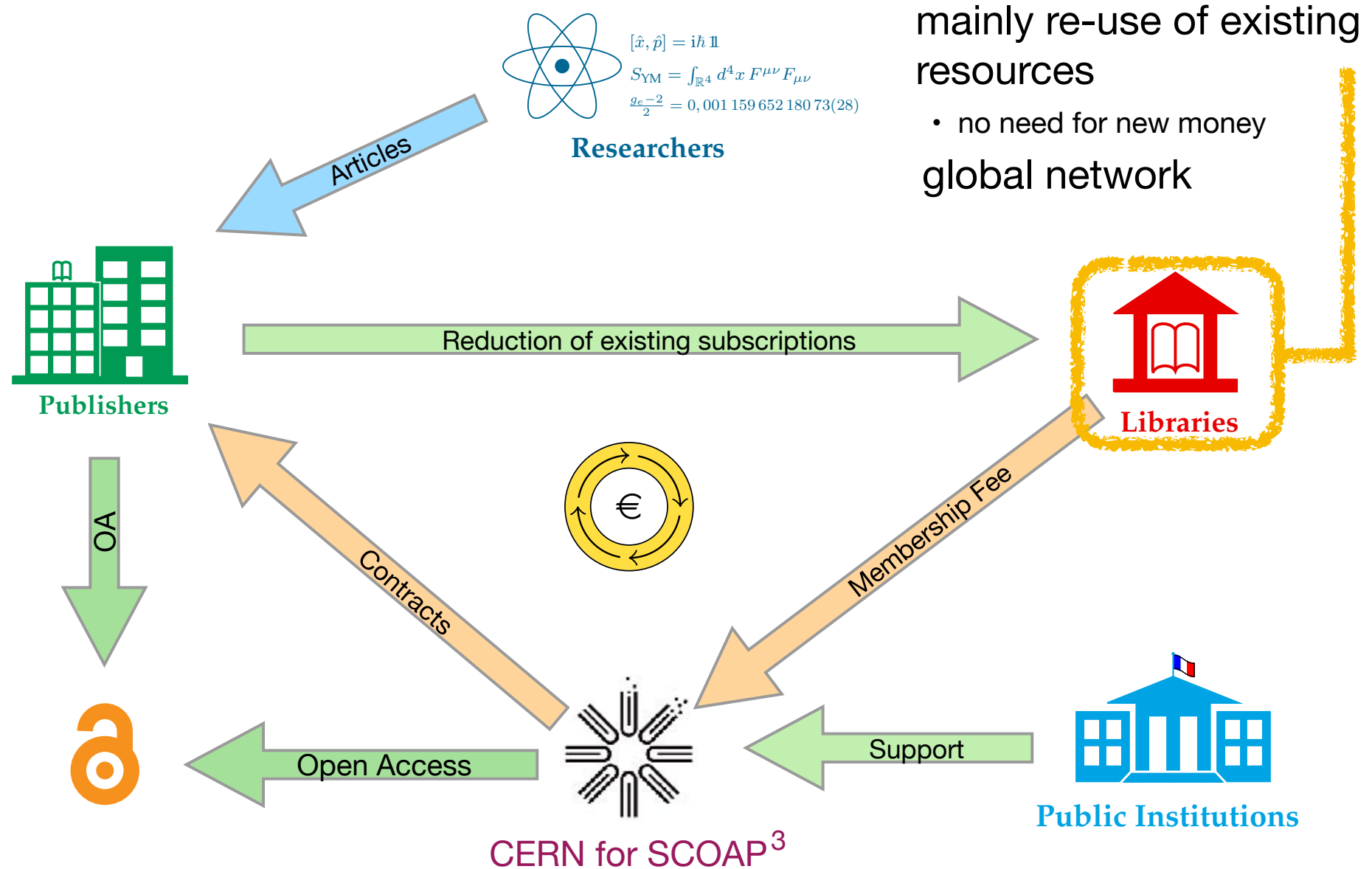
no change in work style

- same journals
- same submission procedures
- simpler way to access papers

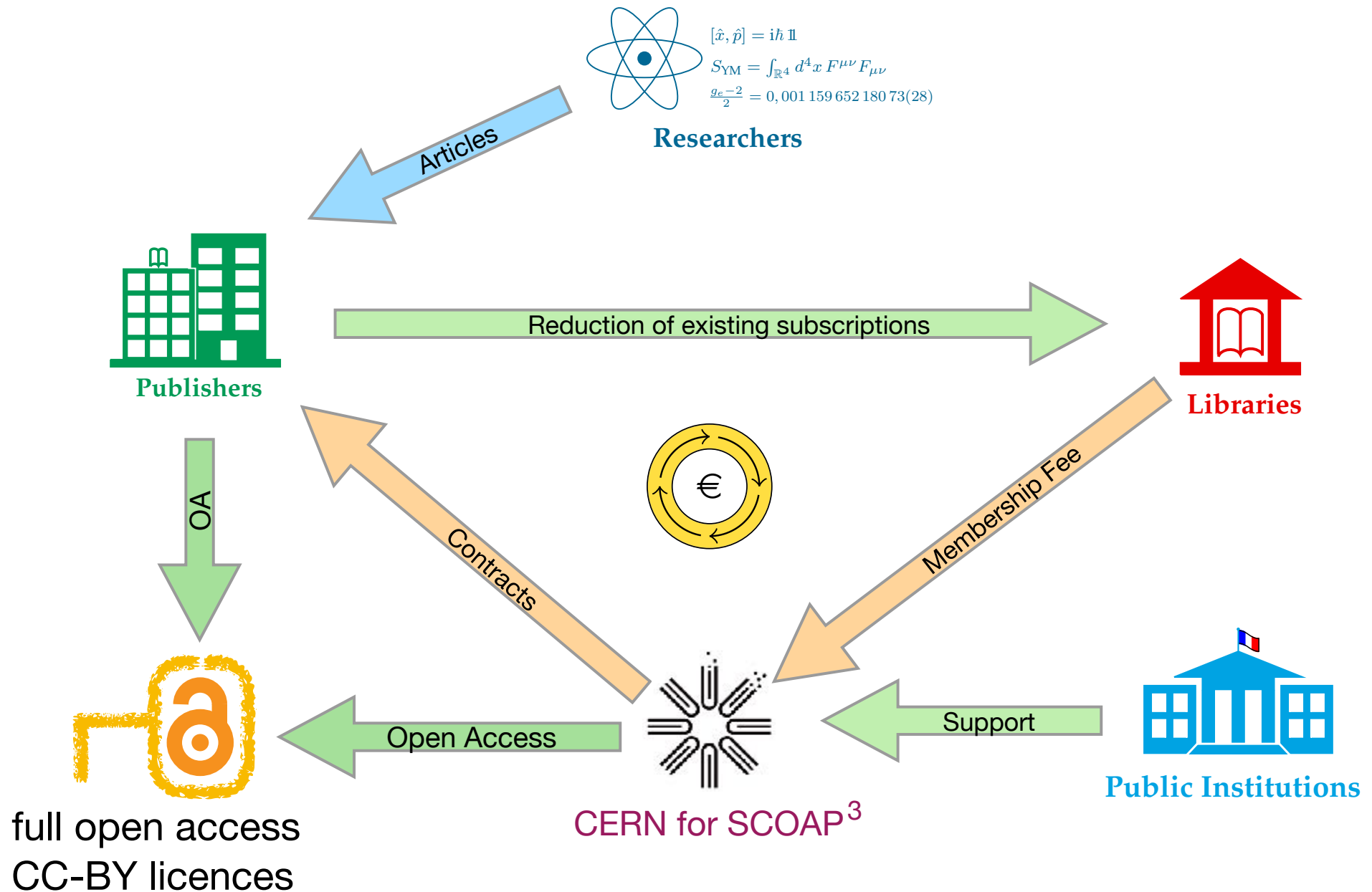
retain copyright



# SCOAP<sup>3</sup> Model: Main Benefits



# SCOAP<sup>3</sup> Model: Main Benefits

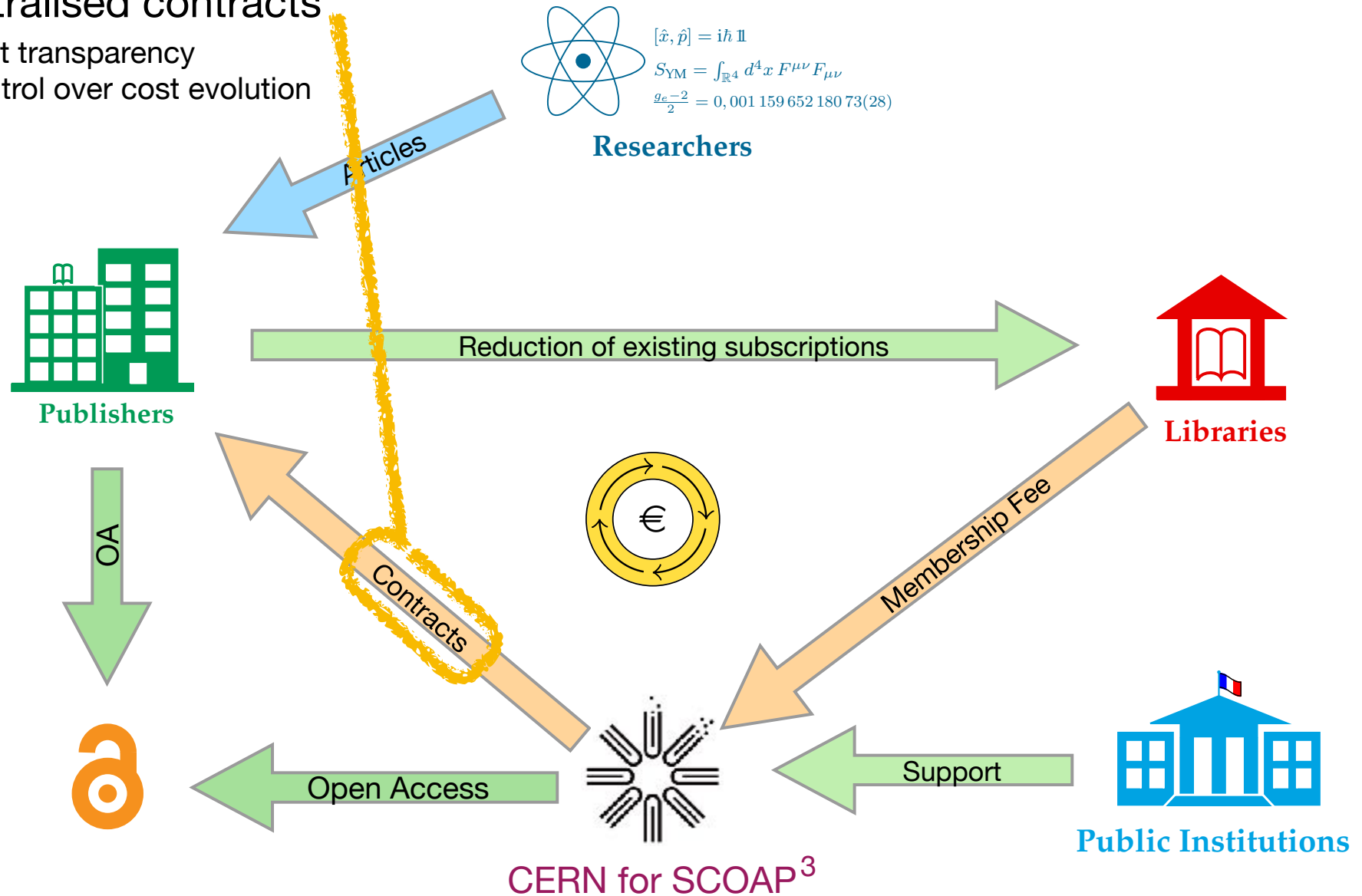




# SCOAP<sup>3</sup> Model: Main Benefits

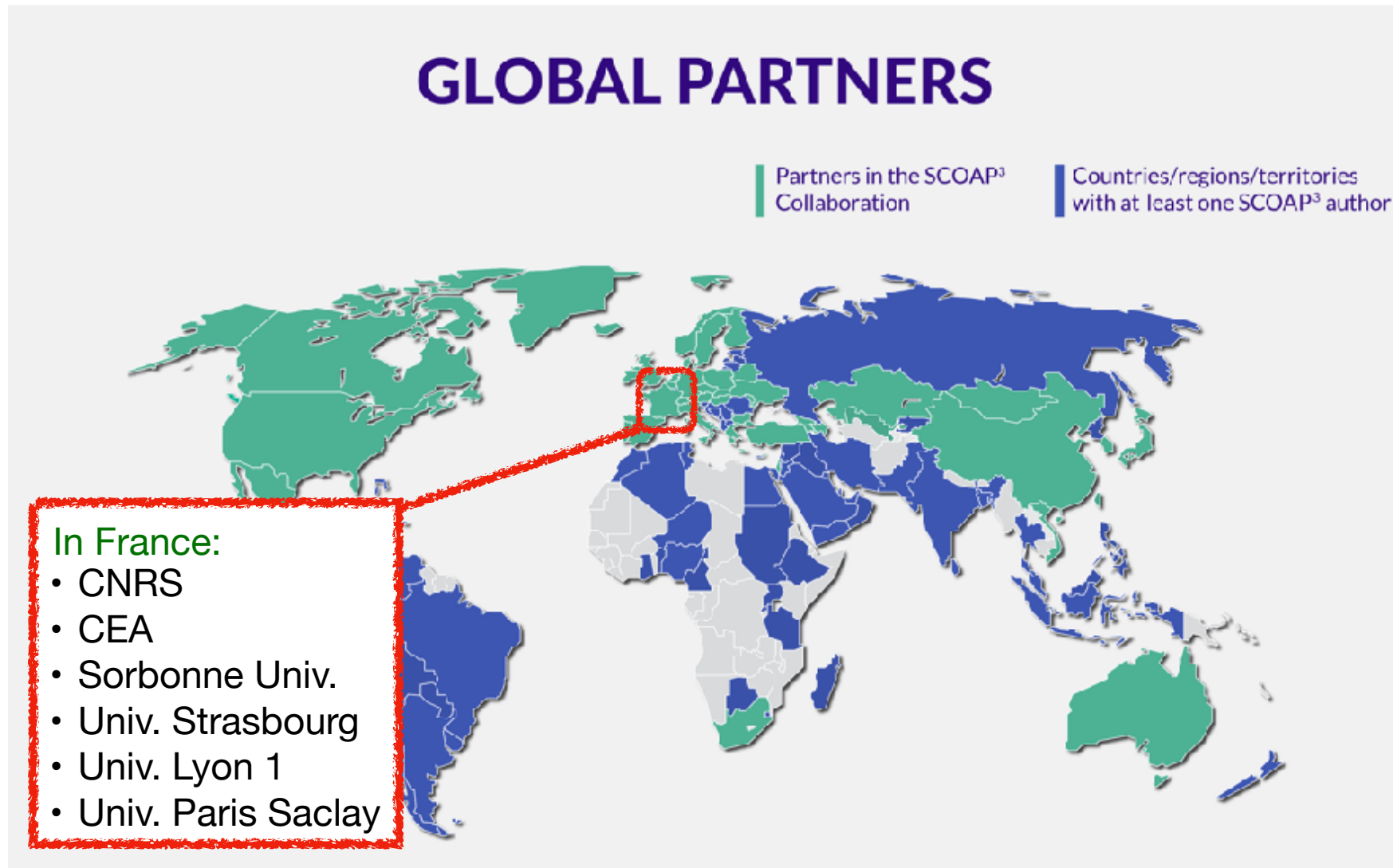
## centralised contracts

- cost transparency
- control over cost evolution



# SCOAP<sup>3</sup> : Implementation

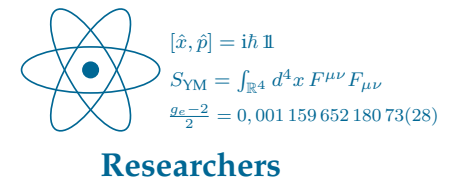
SCOAP<sup>3</sup> is a world-wide consortium:



source: SCOAP3, 2022

3000 libraries and research institutes in 44 countries  
3 intergovernmental institutions (CERN, IAEA, JINR)

research field: high energy physics  
particle physics  
(theoretical+experimental)



20.000 authors in 100 countries, 7500 articles per year

articles in the field are identified through the **ArXiv**

(open-access repository of electronic preprints; started in 1991)

i.e. submitted to one of the four hep categories:

- hep/th (theory)
- hep/ph (phenomenology)
- hep/exp (experiment)
- hep/lat (lattice)



choice made by the authors themselves

in France: authors in 80 institutions, 750 articles per year

# SCOAP<sup>3</sup> partner journals:



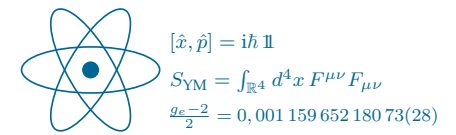
Publisher	Journals	% HEP	Articles published (26/05/2023)
APS (American Physical Society) (since 2018)	Physical Review C	7%	463
	Physical Review D	58%	11.623
	Physical Review Letters	10%	1.481
Elsevier	Nuclear Physics B	100%	2.938
	Physics Letters B	100%	7.789
Hindawi	Advances in High Energy Physics	42%	1.113
IOPp/DPG	New Journal of Physics (until 2016)	3%	25
IOPp/SISSA	Journal of Cosmology and Astroparticle Physics (until 2016)	30%	654
IOPp/CAS	Chinese Physics C	33%	691
Jagiellonian U.	Acta Physics Polonica B	6%	154
Oxford U. Press	Progress in Theoretical and Experimental Physics	48%	806
Springer/SIF Springer/SISSA	European Physical Journal C	100%	8.777
	Journal of High Energy Physics	100%	21.425

Total: 57.939

Accounts for roughly 8-9% of entire HEP literature

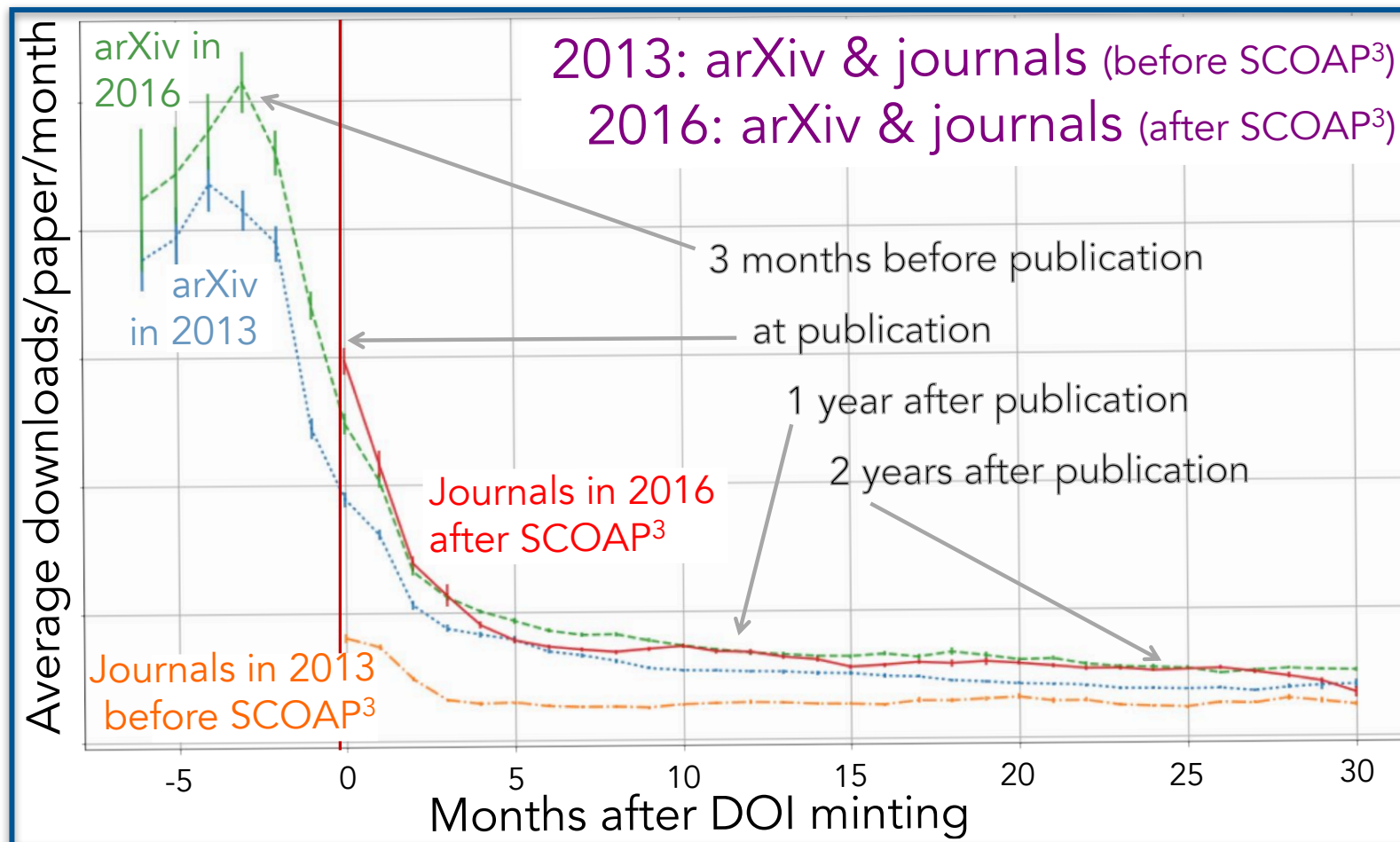


# Does it work?

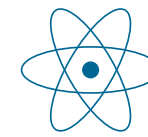


Researchers

- **no** direct costs (neither for reading nor publishing)
- **real** (monitored) **open access**: compliance at almost 100%
- **higher visibility** for articles



## access to the literature:



$$[\hat{x}, \hat{p}] = i\hbar \mathbb{1}$$
$$S_{\text{YM}} = \int_{\mathbb{R}^4} d^4x F^{\mu\nu} F_{\mu\nu}$$
$$\frac{g_e - 2}{2} = 0,001\,159\,652\,180\,73(28)$$

Researchers

- through the webpage of the publisher  
(immediate) open access monitored automatically by SCOAP<sup>3</sup>
- openly through the SCOAP<sup>3</sup> repository (<https://repo.scoap3.org>)

SCOAP<sup>3</sup> Home SCOAP<sup>3</sup> project Partners About Help Documentation Login

# SCOAP<sup>3</sup> Repository


Search 52133 Open Access articles:

Journals	SCOAP <sup>3</sup> partners
Acta Physica Polonica B	144
Advances in High Energy Physics	1132
Chinese Physics C	589
European Physical Journal C	7872
Journal of Cosmology and Astroparticle Physics	654
Journal of High Energy Physics	19429
New Journal of Physics	25
Nuclear Physics B	2710
Physical Review C	395
Physical Review D	9898
Physical Review Letters	1270
Physics Letters B	7285
Progress of Theoretical and Experimental Physics	752

- viable **OA strategy** without the need for additional resources
- transparency and **stability** of costs

	Phase 1 (2014-16)	Phase 2 (2017-19)	Phase 3 (2020-22)
articles	13.429	18.444	est 23.000
total costs	13.8 MEuro	22.1 MEuro	est. 29 MEuro
cost per article	1.027 Euro	1.198 Euro	1.260 Euro

  
 Inclusion of 3 journals from APS

- powerful search engine in the form of SCOAP<sup>3</sup> **repository**
- high quality **metadata** through API search-system

# Why does it work?

The system/model is based on a number of particularities:

- **CERN:**

- international research organisation providing infrastructure
- not only pools financial resources but covers deficit from missing contributions

- **discipline of high energy physics:**

- 'mature' discipline with stable number of articles per year (slight growth >1%)
- well defined perimeter, with small (and stable) number of high quality journals

- **arXiv (green open access):**

- (almost) all of the literature available in the form of preprints

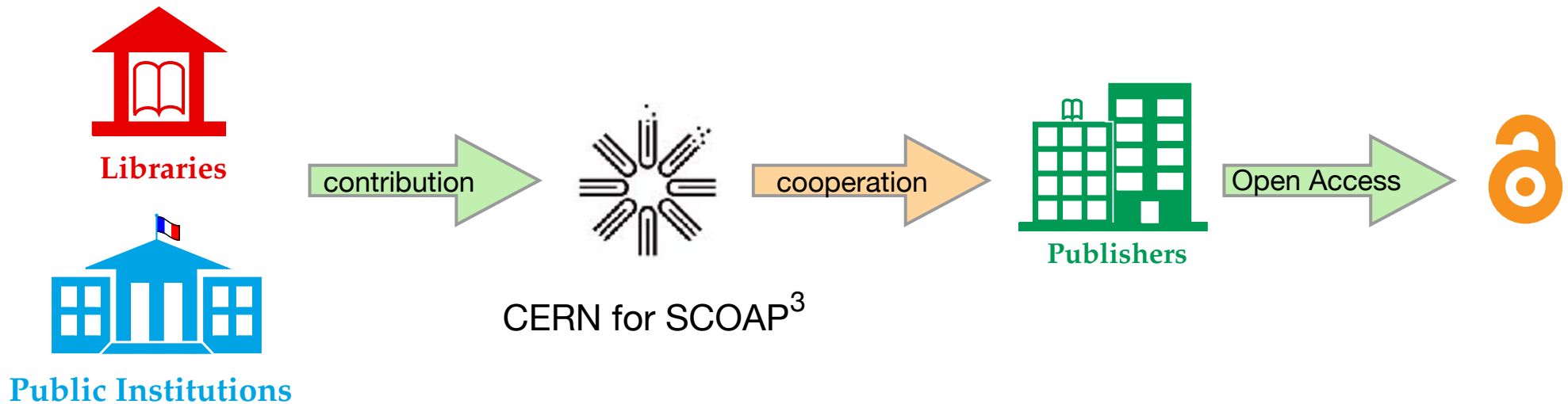
- **world-wide scope of the consortium:**

- 3000 institutions and libraries working together on a global level for a common goal
- from an economic perspective, there are (practically) no other 'bidders' on the market for scientific publications in HEP




# Further Activities: SCOAP<sup>3</sup> for Books

**Idea:** leverage the international network of institutions and support to open up **books** and **monographs** that are relevant for HEP



- **SCOAP<sup>3</sup> partners opt-in** to a central fund managed by **CERN**
- **SCOAP<sup>3</sup> cooperates** with the **publishers** to open up **e-books** relevant for the HEP community
  - list of 60 titles selected by a working group of scientists and librarians based on usage data
- books are made available **open access** (as e-books)

Books are hosted in the SCOAP<sup>3</sup> collection of [OAPEN.org](https://www.oapen.org)



The image shows a screenshot of the OAPEN website. At the top left is the OAPEN logo with the text "Open Access Publishing in all research networks". To the right are three buttons: "Search", "Join", and "Deposit". Below the logo is a navigation bar with links for "For Librarians", "For Publishers", "For Researchers", "Funders", "Resources", and "OAPEN". The main content area has a dark blue background with the title "SCOAP3 - The Sponsoring Consortium for Open Access Publishing in Particle Physics" and the subtitle "Enabling open dissemination of global research outputs in High-Energy Physics". Below this is a white box containing a summary of SCOAP3 and its mission. To the right of the white box is the SCOAP3 logo, which consists of a stylized starburst of colored lines and the text "SCOAP<sup>3</sup> Sponsoring Consortium for Open Access Publishing in Particle Physics".

**open**  
Open Access  
Publishing in all research networks

Search Join Deposit


For Librarians For Publishers For Researchers **Funders** Resources OAPEN

# SCOAP3 - The Sponsoring Consortium for Open Access Publishing in Particle Physics

Enabling open dissemination of global research outputs in High-Energy Physics

SCOAP3 - The Sponsoring Consortium for Open Access Publishing in Particle Physics: Enabling open dissemination of global research outputs in High-Energy Physics

SCOAP3 is a global partnership—consisting of over three thousand libraries, key funding agencies and research centers from some 50 partnering countries and intergovernmental organisations—with a mission to enable barrier-free, equitable Open Access to research in High-Energy Physics.



**SCOAP<sup>3</sup>**  
Sponsoring Consortium for  
Open Access Publishing in Particle Physics

Books are hosted in the SCOAP<sup>3</sup> collection of OAPEN.org  
also freely accessible through: • INIS repository (IAEA)  
• Publisher homepage

The screenshot shows the World Scientific website interface. At the top left is the World Scientific logo with the tagline "Connecting Great Minds". On the top right are icons for Search, My Cart, and Sign In. A navigation bar below the logo contains links for Subject, Journals, Books, Major Reference Works, Resources For Partners, Open Access, About Us, and Help. A large promotional banner for "Book Lovers Day" is displayed, featuring a 30% OFF tag, the text "Valid till 18 August 2022", and the code "LOVEBOOKS30".

The main content area features the book "Quantum Theory of Angular Momentum" by D.A. Varshalovich, A.N. Moskalev, and V.K. Khersonskii. The book cover is shown on the left. The title and authors are prominently displayed. The book is marked as "OPEN ACCESS". The publication details include the DOI (https://doi.org/10.1142/0270), the date (October 1988), and the page count (528). The authors' names and their locations (Leningrad) are listed. Below the title, there are links for "Full Book View", "Tools", "Share", and "Recommend to Library".

On the right side, there are two pricing options for the book:

ISBN: 978-9971-5-0107-5 (hardcover)	GBP 131.00
ISBN: 978-9971-5-0996-5 (softcover)	GBP 46.00

At the bottom left, the SCOAP<sup>3</sup> logo is shown with the text "Open Access funded by SCOAP<sup>3</sup>" and "Copyright 2021© The Editor(s) (if applicable) and The Author(s)". Below this is the text "Sponsoring Consortium for Open Access Publishing in Particle Physics". At the bottom right, there is a banner for "CLASSIC TITLES IN".

At the very bottom, there are tabs for "Description", "Chapters", and "Reviews".

in preparation: program for front-list books

# Summary

- **SCOAP<sup>3</sup>** is a consortium to sponsor open access publications in the field of high energy physics
- **collaborative, global and transparent** approach
- business model based on **re-use** of existing resources
  - cost stability and transparency
  - full and immediate open access
  - authors retain copyright
- **no burden** for authors
  1. submit your article to the arXiv in one of the 4 hep-categories
  2. Submit your article to one of the partner journals (no APCs)
- unique in its form and **adapted** to the field of HEP
- it works: > 50.000 articles since 2014
- OA activities **beyond** the publication of research articles
  - e.g. SCOAP<sup>3</sup> for books