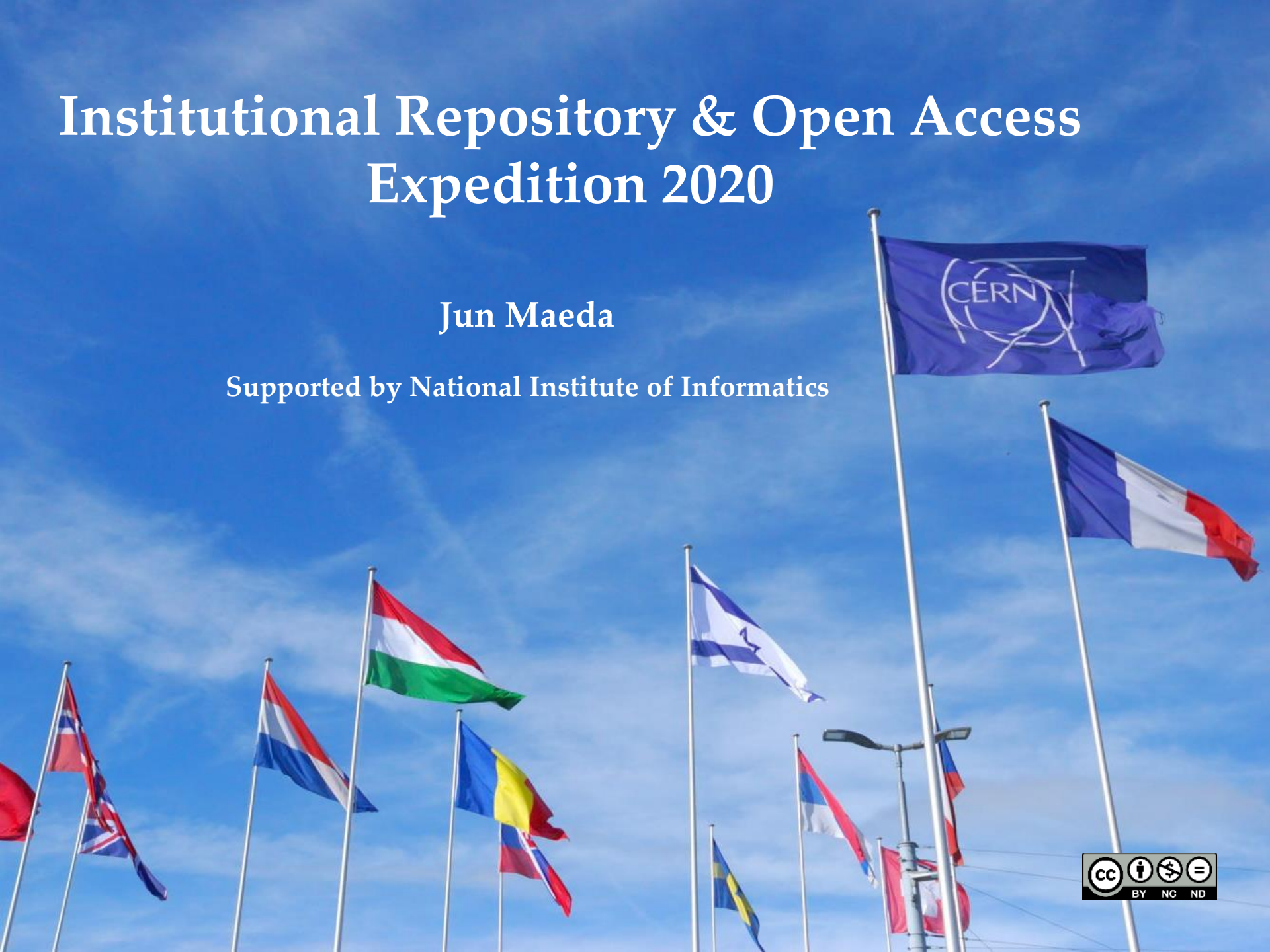
Institutional Repository & Open Access Expedition 2020

Jun Maeda

Supported by National Institute of Informatics



Revisiting the Values of Institutional Repositories

だが、留学に期待する最大の恩恵は、進んだ情報を本場で得る輸入業にはない。異文化からもたらされる知識は、加算的に作用して既存の世界観を豊かにするのではない。**新しい知識を加えるのではなく、今ある価値体系を壊す。これこそが留学の目的**だ。

科学や学問の進歩に貢献するのは、新事実の発見だけではない。**より重要なのは、事実を把握する思考枠の見直し、つまりメタレベルでの再構築**である。

小坂井敏晶『答えのない世界を生きる』より

Background

JPCOAR

2020- : Repository Workflow Development Team
2018-2019: Green Open Access Analytical Team
2017-2018: JAIRO Cloud-ORCID Task Force

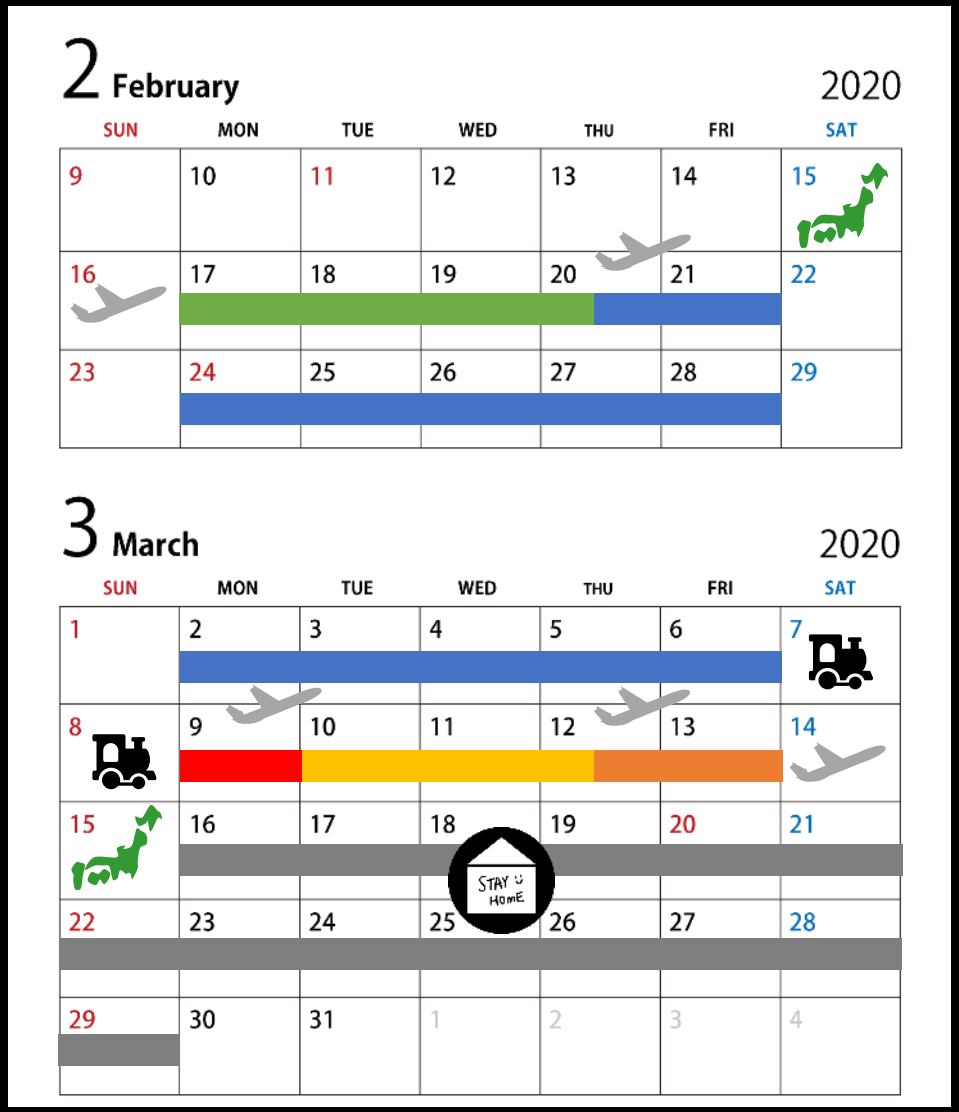
Library

2015.4- : Hokkaido University Library
(Currently in Cataloging Section)

Academic

2015.3 : Ph.D. (Sci.) Hokkaido University

Institutional Repository & Open Access Expedition 2020



International Digital Curation Conference

Collaboration in CERN

Visit to ETH Zurich Library

Open Science Conference

Visit to Max Planck Digital Library

Self quarantine

Conferences & Interviews

International Digital Curation Conference

FAIRsFAIR

- FAIR training tool in development: who to share, where to deposit
- Data curation = metadata
  No more than 10-20 min
- Pull-down? Accuracy and easiness
- No one wants to be police
- PhD education

RDM/DMP

- No relation between DMP quality and funding (Norway, US)
- DMP goals is to be accepted; Scientific outcomes are the priority
- Legal risks in SSH domain

Open Science

- 85 % researches are wasted
  Loss of 10.2bn Euro without FAIR
- PhD education

International Open Science Conference

Open Science

- Needs rewards and recognition
- Support to researchers
- Legal and funding questions
- Institutional resistance

4 barriers
- awareness
- relevance
- effectiveness
- sustainability

Open data

- Qualitative data?
- Open data for citizen science

2nd day

---Closed---

IR : Leave it as a choice for OA

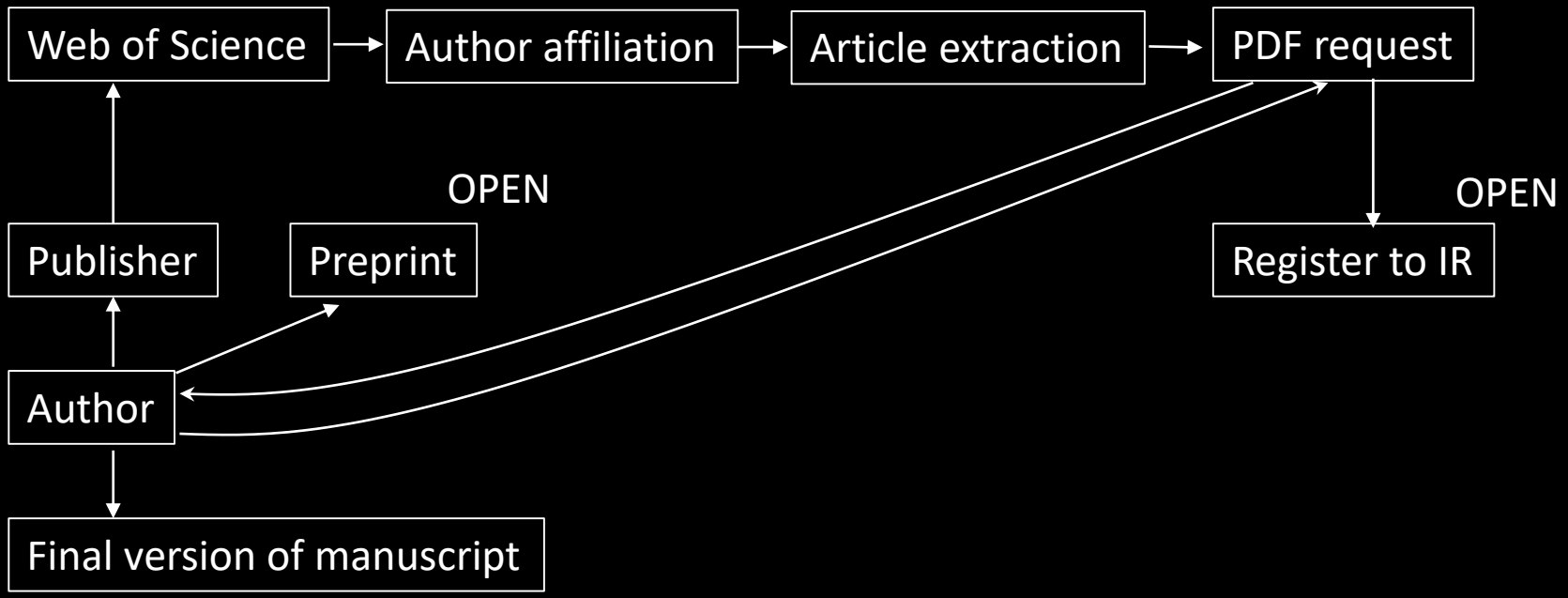
ETH Zürich Library

- Scientific activity documenting system mandatory for all faculty members
- IR as a choice for OA
  (No PDF request e-mail to authors)

Max Planck Digital Library

- Green OA cannot be a solution of open access: OA2020 is the best way
- Time to think the purpose/value of IRs

Japan's standard workflow (for STEM)



ETHZ, CERN's way

Research activity documenting system

This will be emerging in Japan in accordance with the wide spread of RDM system.

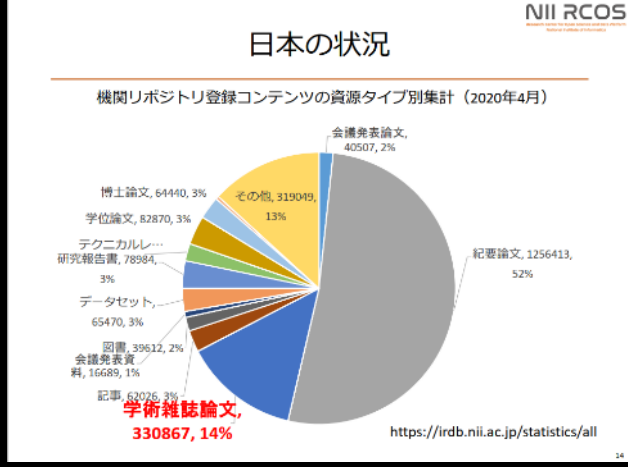
Researchers chose any way of open access:
Gold OA, IRs, other repository, self-archive

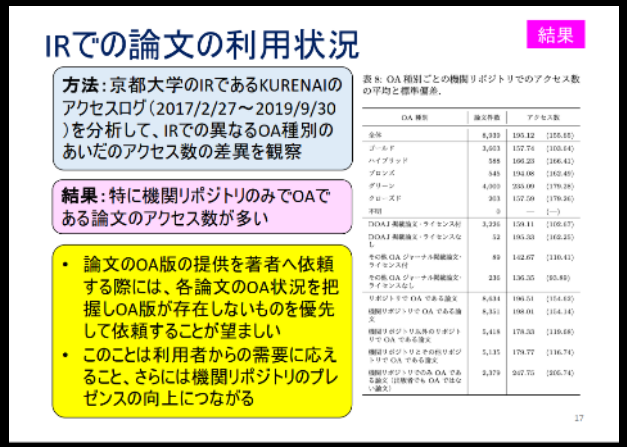
Paradigm Shift

Community driven ← IR driven

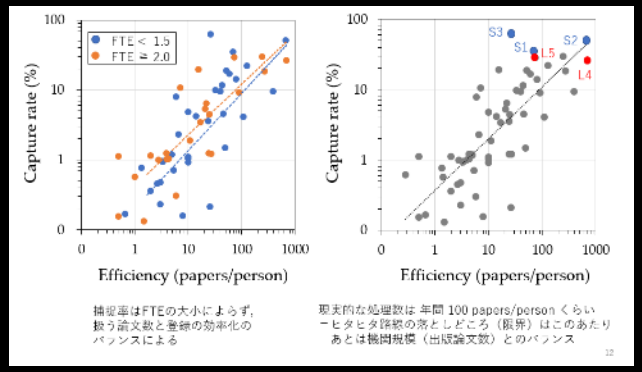
SSH : Priority, more active use

STEM : “Leave IR as a choice” policy

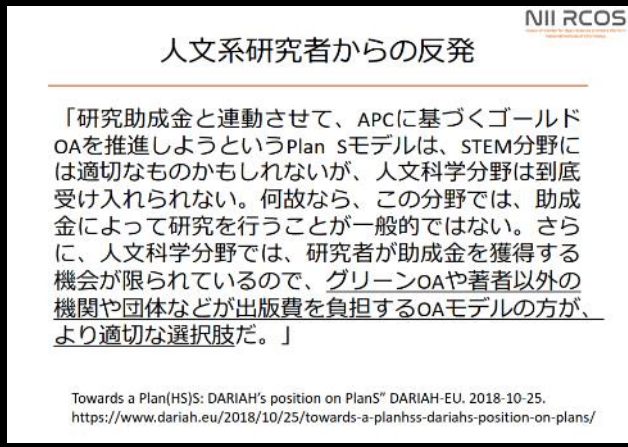




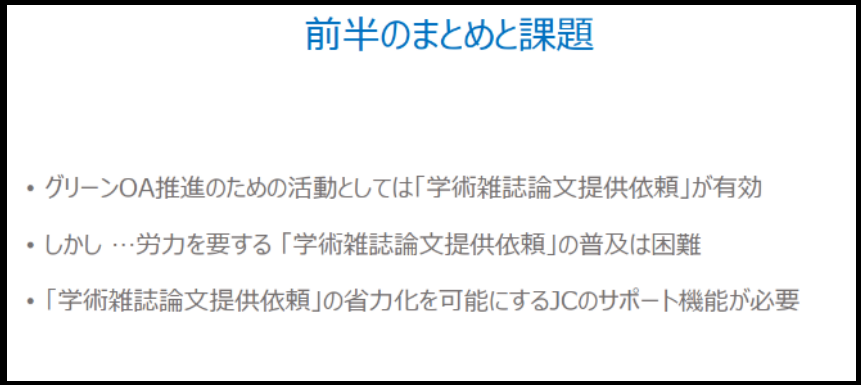
Nishioka (2020)



Maeda (2020)



Ojiro (2020)



Kawai (2020)

Accelerating Science

through the collaboration of CERN and Japan

Jun Maeda
Hokkaido University

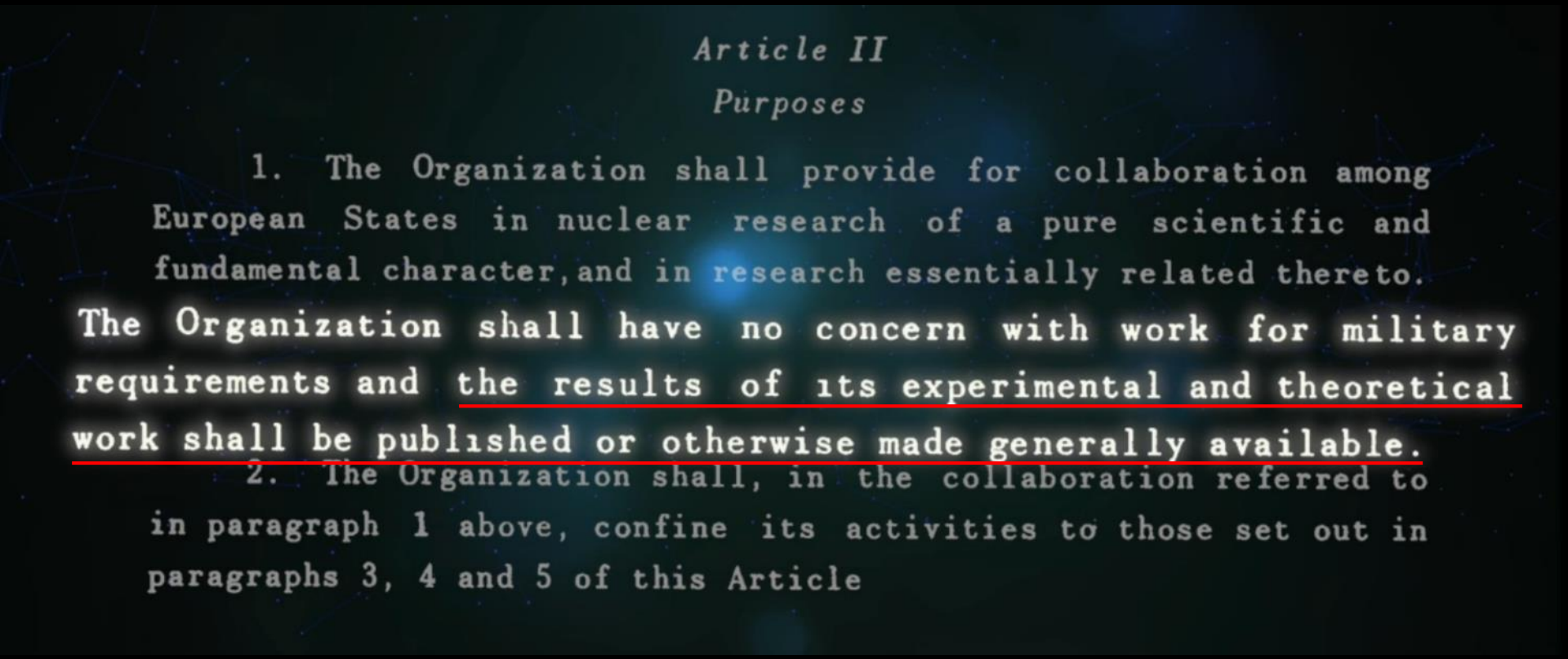
CERN's background

Conseil **E**uropéen pour la **R**echerche **N**ucléaire

1949 WWII ended

1949 WWII ended

1954 CERN established, "Science for Peace"



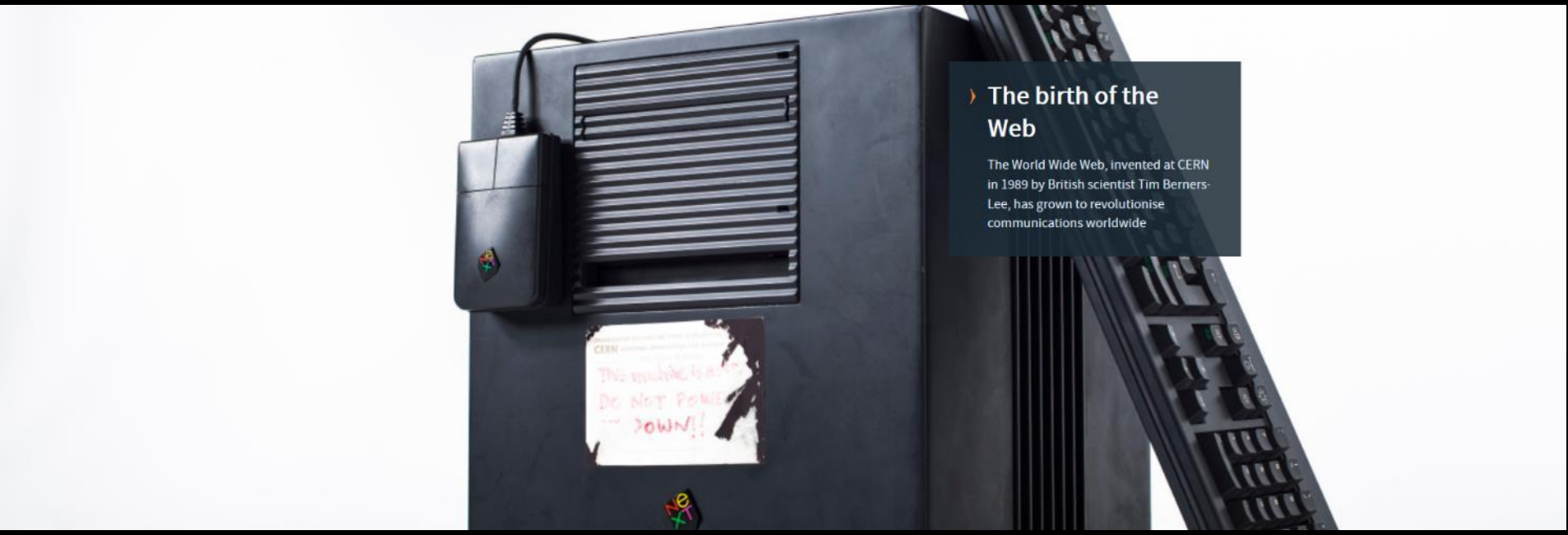
Article II

Purposes

1. The Organization shall provide for collaboration among European States in nuclear research of a pure scientific and fundamental character, and in research essentially related thereto. The Organization shall have no concern with work for military requirements and the results of its experimental and theoretical work shall be published or otherwise made generally available.

2. The Organization shall, in the collaboration referred to in paragraph 1 above, confine its activities to those set out in paragraphs 3, 4 and 5 of this Article

1949 WWII ended
1954 CERN established, “Science for Peace”
1989 World Wide Web invented



Place of Openness

Article II

Purposes

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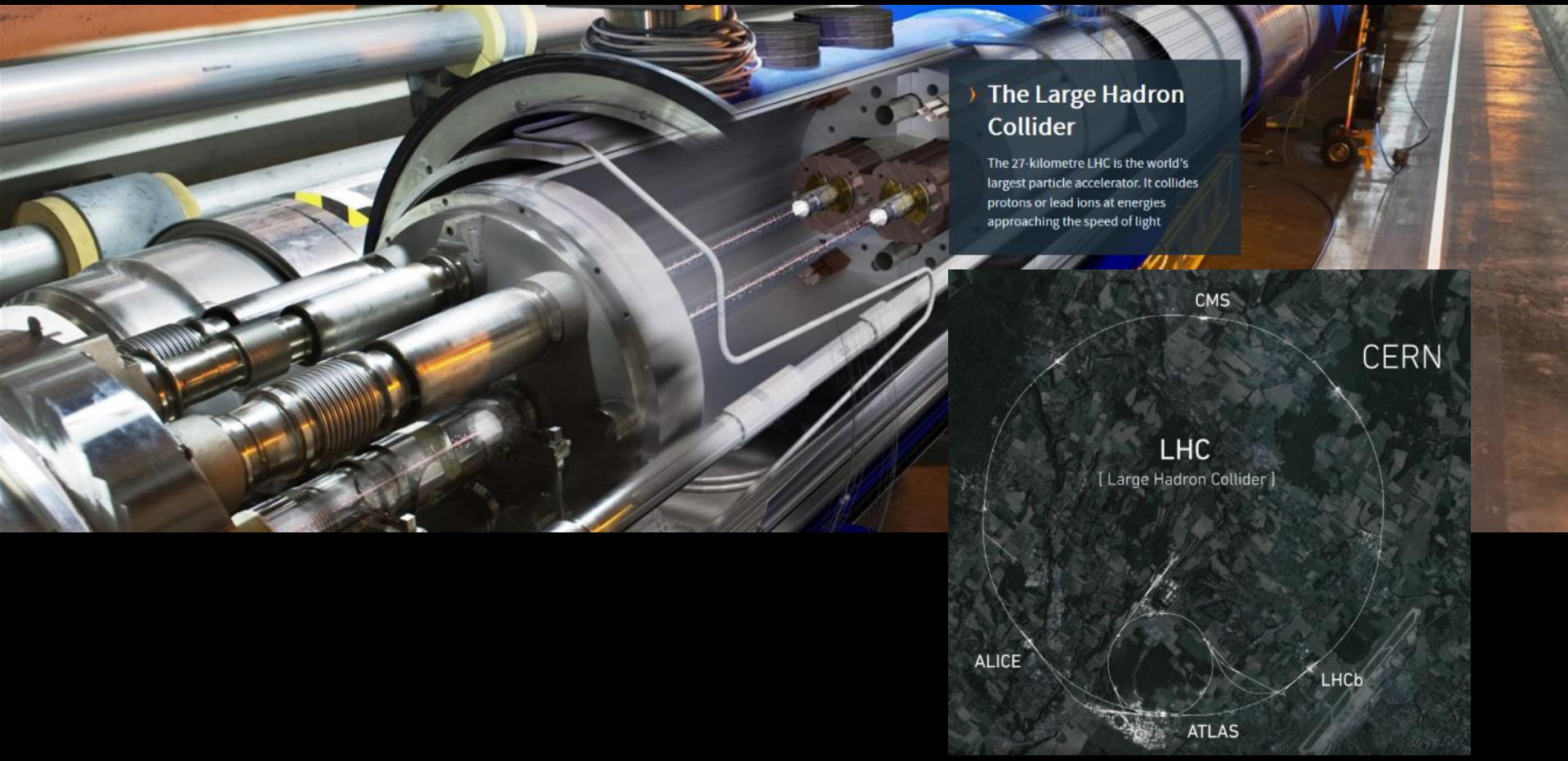
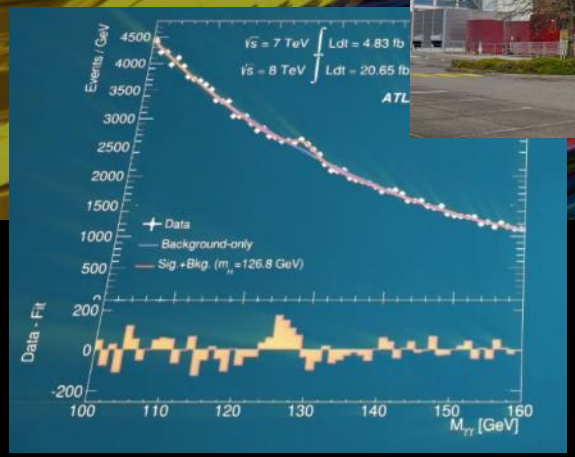
Science for Peace

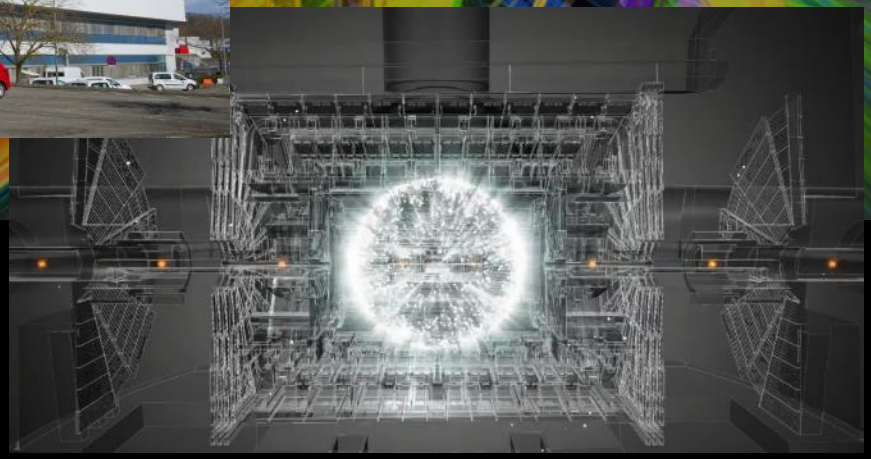
World Wide Web

1949 WWII ended
1954 CERN established, “Science for Peace”
1989 World Wide Web invented
2008 LHC started running



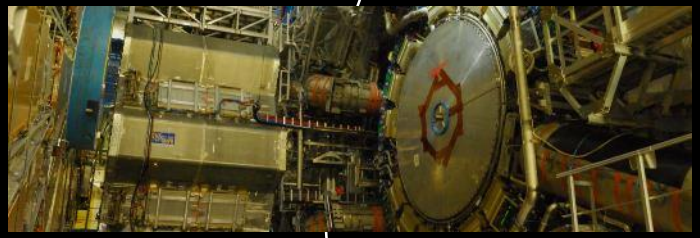
1949 WWII ended
1954 CERN established, "Science for Peace
1989 World Wide Web invented
2008 LHC started running
2012 Higgs Boson discovered

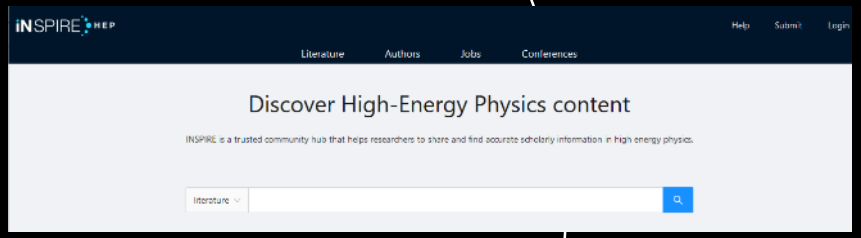




Experiments

- Where physical collision becomes data





INSPIRE

- Where knowledge becomes heritage

Data Centre

- Where data becomes knowledge

INSPIRE

INSPIRE

- Main high energy physics (HEP) information platform:
  literature, author, institutions, jobs
- Since 2012; Updated 2020.3
- Freely available
- Run by 5 partners

- 50000 active users
- 13000000 bibliographic records
  - arXiv preprints (97%)
  - Published papers (60% of arXiv → 40% arXiv records)
  - Theses
  - Conference proceedings
- 120000 author records
- 23000000 citations
- 200000 searches / day

Discover High-Energy Physics content

INSPIRE is a trusted community hub that helps researchers to share and find accurate scholarly information in high energy physics.

literature

How to Search

INSPIRE supports the most popular SPIRES syntax operators and free text searches for searching papers.

SPIRES | free text

Search by	Use operators	Example
Author name	a, au, author, name	a witten
Title	t, title, ti	t A First Course in String Theory
Collaboration	cn, collaboration	cn babar
Number of authors	ac, authorcount	ac 1->10
Citation number	topcite, topcit, cited	topcite 1000+

Date of paper

2018 2019

Number of authors

- Single author 783
- 10 authors or less 4,483

Exclude RPP

- Exclude Review of Particle Physics 5,944

Document Type

- article 4,177
- published 3,827
- conference paper 1,690
- review 101
- book chapter 63
- thesis 28
- proceedings 24

5,945 results | cite all

Most Recent

1. BV and BFV for the H-twisted Poisson sigma model #1

Noriaki Ikeda (Ritsumeikan U., Kusatsu), Thomas Strobl (ICJ, Lyon) (Dec 31, 2019)

e-Print: 1912.13511 [hep-th]

pdf cite edit 0 citations

2. Notes on the Quantum Corrections of Swampland and Trans-Planckian Censorship Conjecture #2

Sichun Sun (INFN, Rome and Rome U.), Yun-Long Zhang (Kyoto U., Yukawa Inst., Kyoto) (Dec 31, 2019)

e-Print: 1912.13509 [hep-th]

pdf cite edit 3 citations

3. Geometric crystals and cluster ensembles in Kac–Moody setting #3

Yuki Kanakubo, Toshiki Nakashima (Dec 31, 2019)

Published in: *J.Geom.Phys.* 149 (2020) 103576

DOI cite edit 0 citations

4. Modular Parametrization as Polyakov Path Integral - Cases with CM Elliptic Curves as Target Spaces - #4

Satoshi Kondo (Tokyo U., IPMU and Unlisted, TR), Taizan Watari (Tokyo U., IPMU) (Dec 31, 2019)

e-Print: 1912.13294 [hep-th]

pdf cite edit 2 citations

5. Lagrangian and Hamiltonian formulations for two interacting massless particles in de Sitter space #5

Naohiro Kanda (Nihon U., Tokyo), Satoshi Okano (Nihon U., Tokyo) (Dec 31, 2019)

e-Print: 1912.13450 [hep-th]

Feedback

Mairi Sakellariadou (King's Coll. London)

astro-ph hep-ph hep-th quant-ph

Author Identifier: M.Sakellariadou.1

Advisor: Vilenkin, Alexander

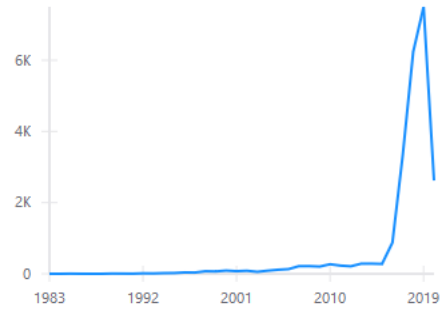
present

[redacted]

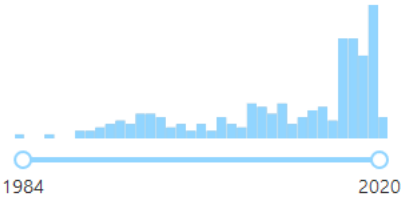
Show all positions (6)

edit

Citations per year



Date of paper



Number of authors

- Single author 48
- 10 authors or less 174

265 results | cite all

Most Recent

GW190412: Observation of a Binary-Black-Hole Coalescence with Asymmetric Masses #1

LIGO Scientific and Virgo Collaborations • R. Abbott (LIGO Lab., Caltech) et al. (Apr 20, 2020)

e-Print: 2004.08342 [astro-ph.HE]

pdf cite edit 37 citations

Upper limits on the temperature of inspiraling astrophysical black holes #2

Ka-Wai Chung, Mairi Sakellariadou (Mar 21, 2020)

e-Print: 2003.09778 [gr-qc]

pdf cite edit 0 citations

Feedback

Author disambiguation

J. Maeda

- Maeda Jiro
  （前田 次郎、二郎、二朗）
- Maeda Jin
  （前田 陣、仁）
- Maeda Jun
  （前田 純、淳、潤）
- Maeda Jungoro
  （前田 淳五郎、潤五郎）

Japan can help where INSPIRE needs help

Friend in need is a friend indeed, isn't it?

The author disambiguation problem

- To be useful, one profile should contain **all** papers of **one single** author
- Easy case: only one "Moskovic, M."
- Hard case: "Zhang, J."

72	J.Zhang.8	Zhang, Jingxi	Recent Papers
73	J.Zhang.24	Zhang, Juyong	Recent Papers
74	J.Zhang.14	Zhang, Jiehao	Recent Papers
75	J.Zhang.34	Zhang, Juping	Recent Papers
76	J.Zhang.1	Zhang, Jianfu	Recent Papers
77	J.Zhang.47	Zhang, Junwei	Recent Papers
78	J.Zhang.71	Zhang, Junjie	Recent Papers
79	J.Zhang.44	Zhang, Jingye	Recent Papers
80	J.Zhang.29	Zhang, Jifang	Recent Papers
81	Jinlong.Zhang.1	Zhang, Jinlong	Recent Papers

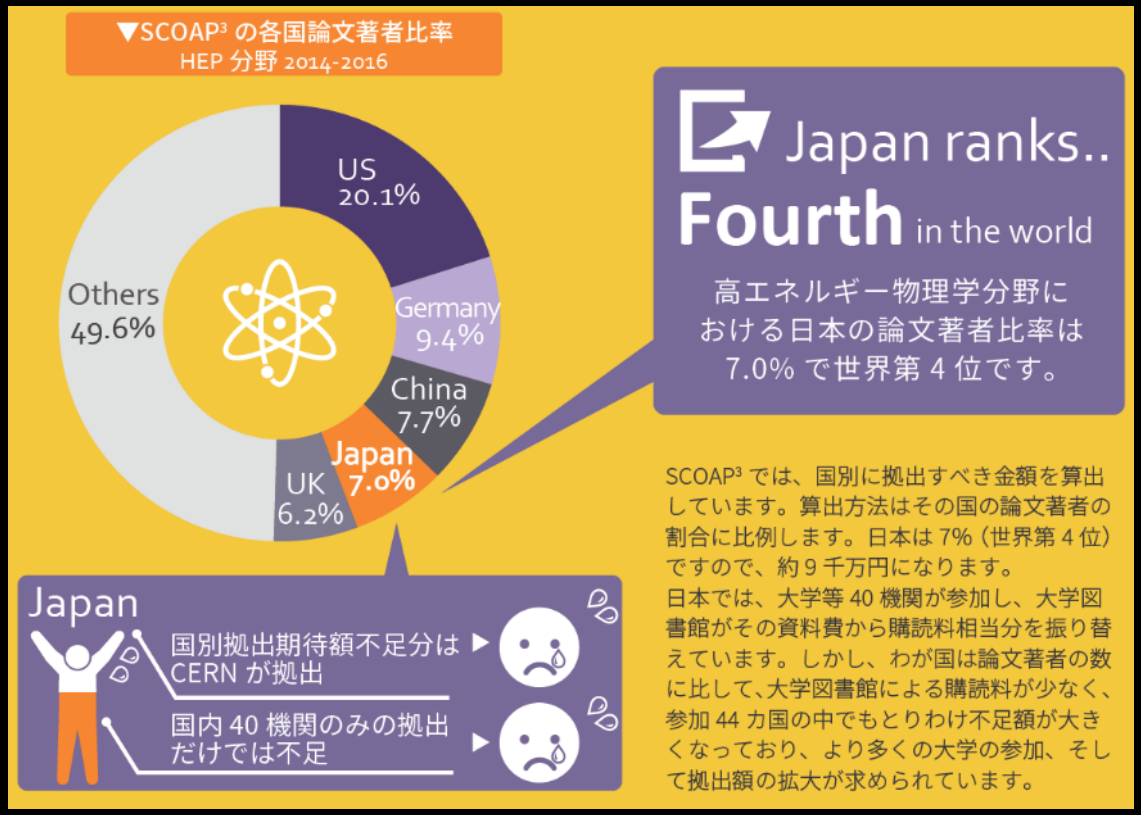
Moskovic (2018)

Disambiguating authors

- Solving this requires lots of work from INSPIRE staff

- Good news, you can help make INSPIRE better!

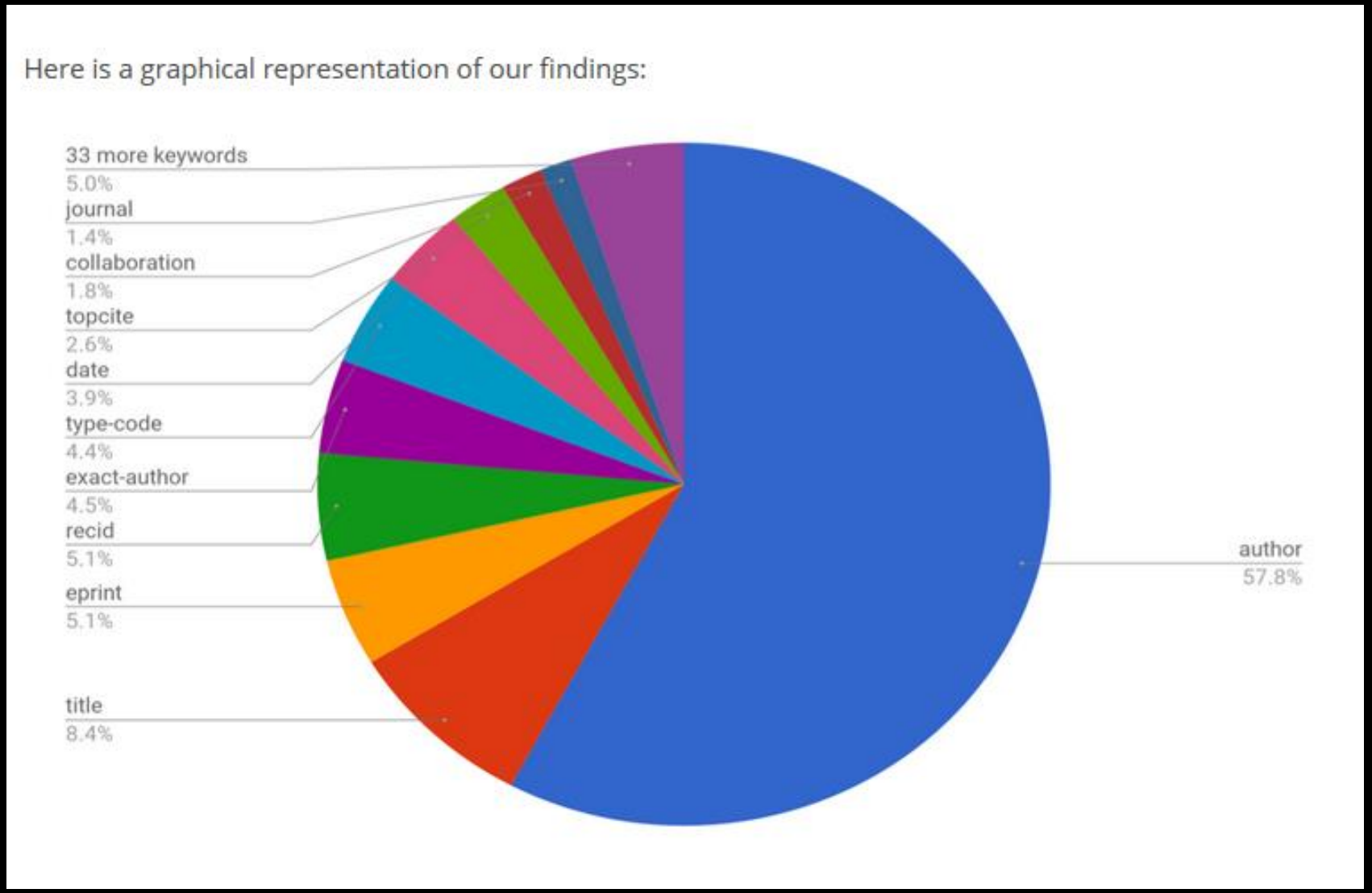
SCOAP3: Curation for better cost estimation



INSPIRE Collaboration

CERN DESY. Fermilab cnrs IN2P3 SLAC

Accurate author records to support users' demand



INSPIRE Curation in Practice

Let's see how it works…

Article Curation –Main

Save | New Ticket

Main | References | Authors

CURATED | CORE | CITEABLE | REFEREED | WITHDRAWN | DELETED

document type

article

collections

Literature

titles

title	source
CP-odd Higgs boson production in $e\gamma$ collisions	Elsevier
CP-odd Higgs Boson Production in $e\gamma$ Collisions	arXiv

dois

value
10.1016/j.physletb.2018.04.005

report numbers

value
MISC-2017-10

arxiv eprints

value	categories
1712.00197	hep-ph
	Add new

inspire categories

term
Phenomenology-HEP

public notes

value	source
PDFLatex, elsarticle.cls used, 5 pages, 7 PDF figures. Revised	arXiv

arXiv | doi

1 of 6

Abstract

We investigate the
denote as A^0, is ex
the Minimal Super
electroweak one-lo
large. There are no
section for the A^0 p

Keywords: CP-od

1. Introduction

After the Higgs
ered by ATLAS ar
couplings were ex
in constructing a n
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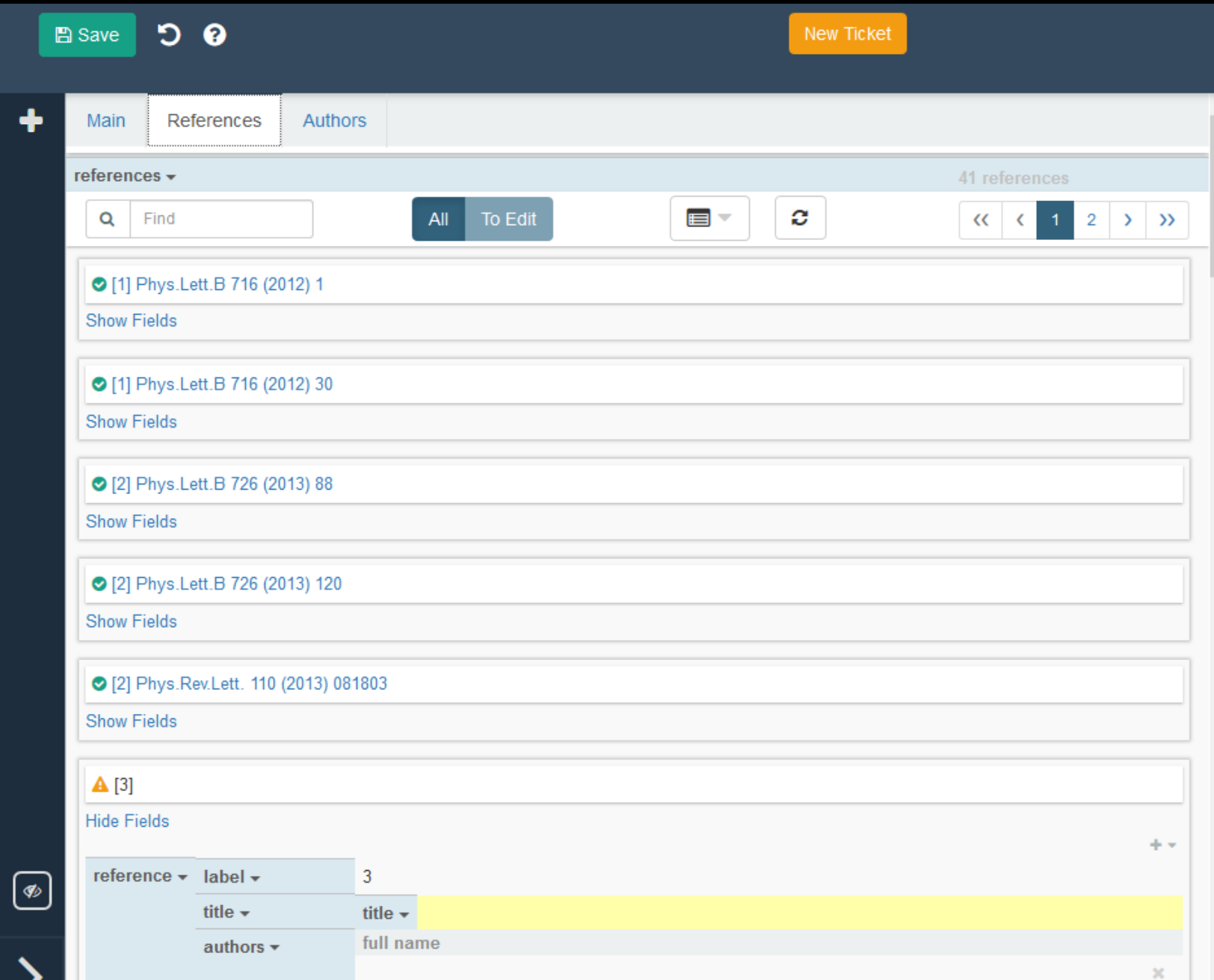
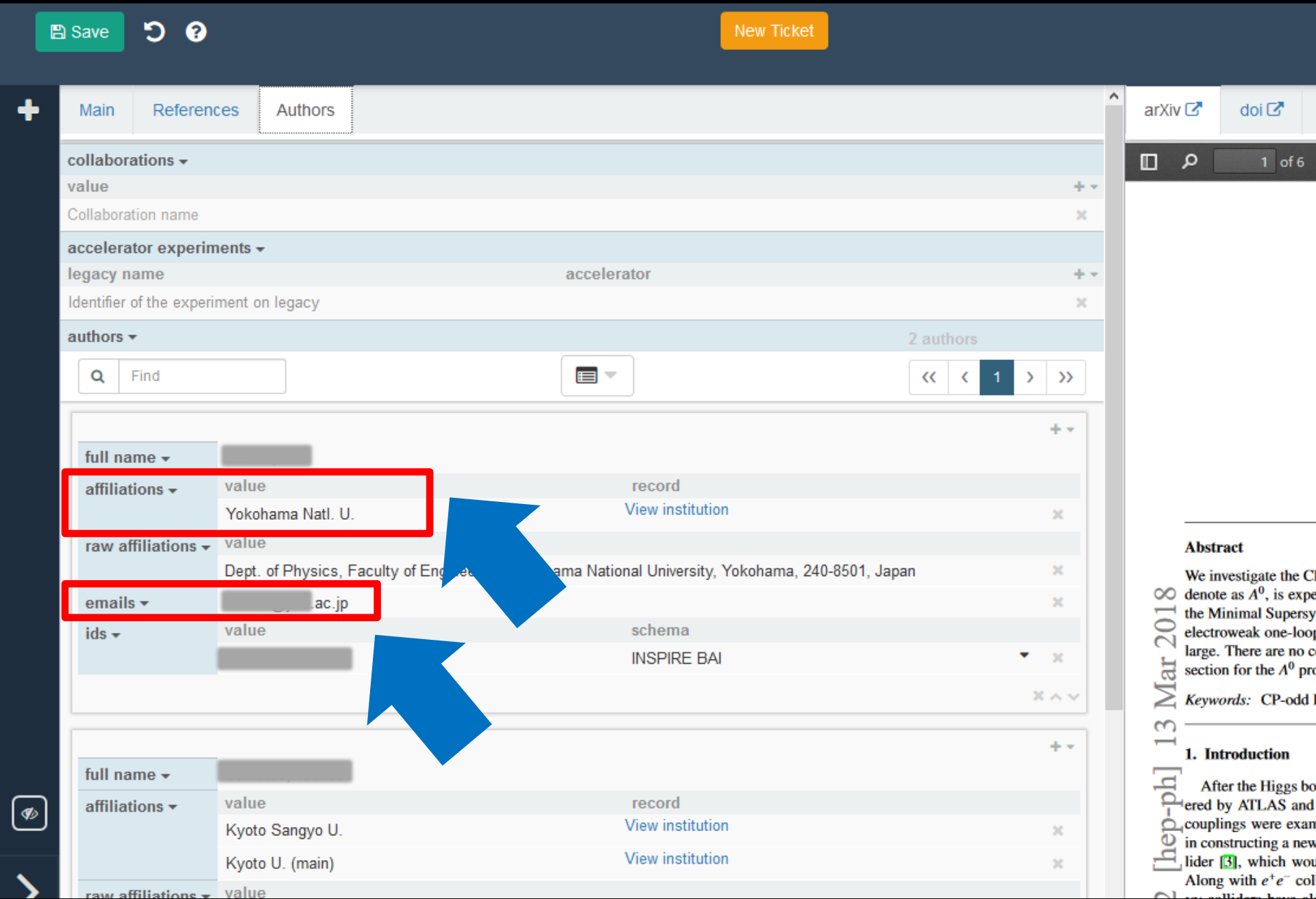
Along with e^+e^- c

[hep-ph] 13 Mar 2018

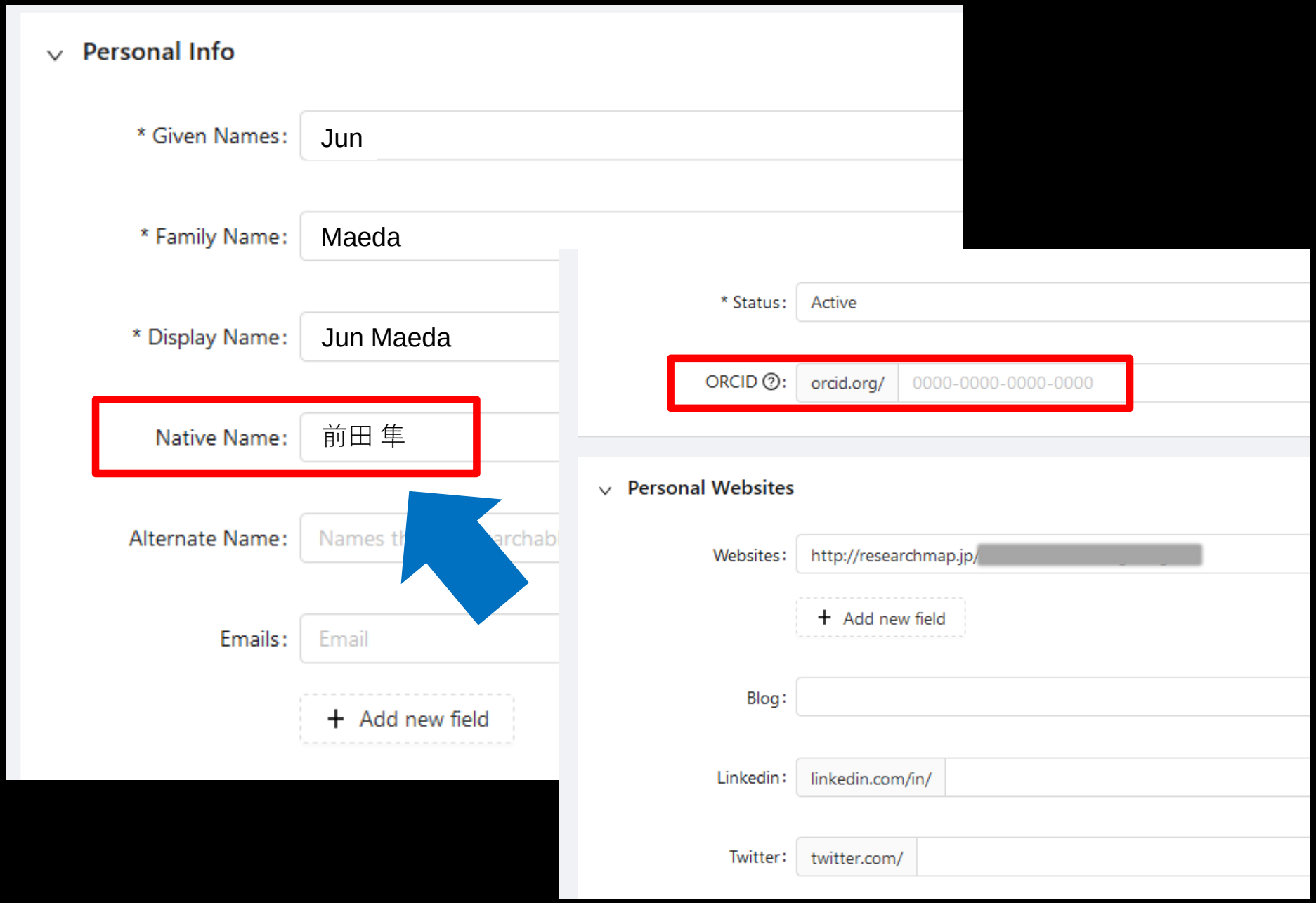
Article Curation –References



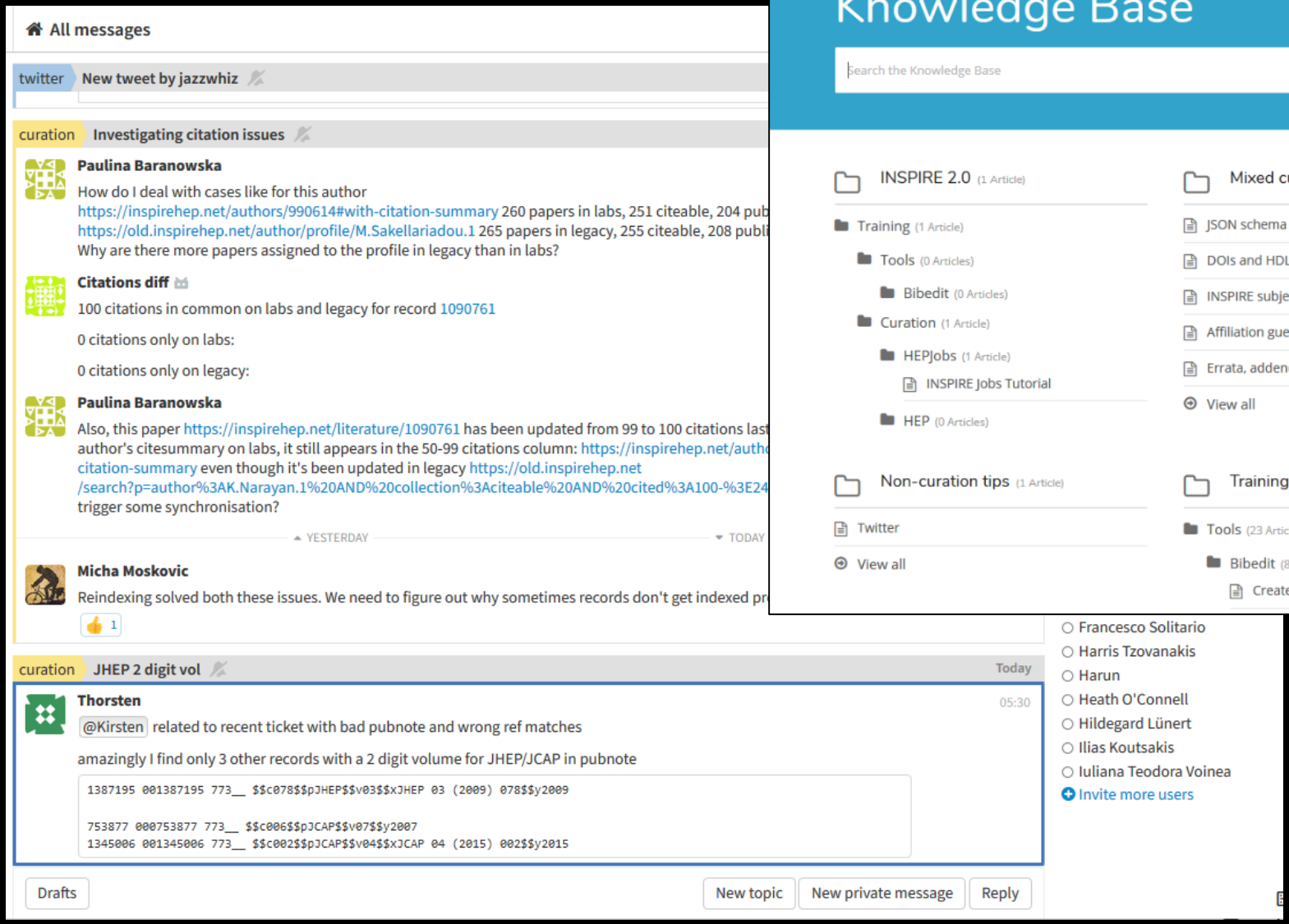
Article Curation –Authors



Author Profile Curation



Online Help Tools



Japan's HEP records

2018-2019: 5945 papers

The issue is that INSPIRE needs

- native names
- e-mail addresses
- KAKEN IDs

for Japanese author disambiguation

Comparison of INSPIRE & JAIRO Cloud

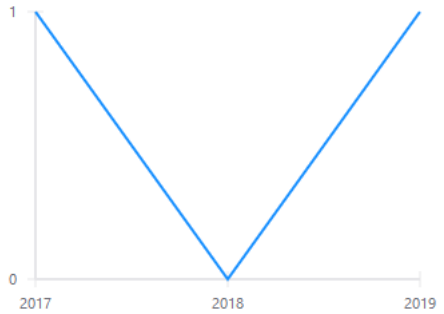
CP-odd Higgs boson production in $e\gamma$ collisions

Ken Sasaki (Yokohama Natl. U.), Tsuneo Uematsu (Kyoto Sangyo U. and Kyoto U. (main))
Dec 1, 2017

6 pages
Published in: *Phys.Lett.B* 781 (2018) 290-294
e-Print: 1712.00197 [hep-ph]
DOI: 10.1016/j.physletb.2018.04.005
Report number: MISC-2017-10
View in: ADS Abstract Service

pdf cite

Citations per year



Abstract: (Elsevier)
We investigate the CP-odd Higgs boson production via two-photon processes in eγ collisions. The CP-odd Higgs boson, which we denote as A0 , is expected to appear in the Two-Higgs Doublet Models (2HDM) as a minimal extension of Higgs sector for which the Minimal Supersymmetric Standard Model (MSSM) is a special case. The scattering amplitude for eγ→eA0 is evaluated at the electroweak one-loop level. The dominant contribution comes from top-quark loops when A0 boson is rather light and tanβ is not large. There are no contributions from the W -boson and Z -boson loops nor the scalar top-quark (stop) loops. The differential cross section for the A0 production is analyzed.

Note: PDFLatex, elsarticle.cls used, 5 pages, 7 PDF figures. Revised arguments in sections 2 and 3. Added one figure and references.Results unchanged

CP-odd Higgs production | Two-photon fusion | Transition form factor | eγ -collisions | eγ-collisions | new physics | photon electron: scattering | photon electron: colliding beams | photon photon: fusion | Higgs particle: production | Show all (16)

References (41) Citations (2) Figures (7)

[1] Observation of a new particle in the search for the Standard Model Higgs boson with the ATLAS detector at the LHC
ATLAS Collaboration • Georges Aad (Freiburg U.) et al.
Phys.Lett.B 716 (2012) 1-29 • e-Print: 1207.7214 • DOI: 10.1016/j.physletb.2012.08.020 • https://atlas.web.cern.ch/Atlas/GROUPS/PHYSICS/PAPERS/HIGG-2012-27, http://www.interactions.org/cms/?pid=1031893, https://science.energy.gov/hep/highlights/2012/hep-2012-10-b/

[1] Observation of a New Boson at a Mass of 125 GeV with the CMS Experiment at the LHC
CMS Collaboration • Serguei Chatrchyan (Yerevan Phys. Inst.) et al.
Phys.Lett.B 716 (2012) 30-61 • e-Print: 1207.7235 • DOI: 10.1016/j.physletb.2012.08.021 • http://public.web.cern.ch/public, http://www.interactions.org/cms/?pid=1031893, https://science.energy.gov/hep/highlights/2012/hep-2012-10-b/

[2] Measurements of Higgs boson production and couplings in diboson final states with the ATLAS detector at the LHC
ATLAS Collaboration • Georges Aad (Freiburg U.) et al.
Phys.Lett.B 726 (2013) 88-119, Phys.Lett.B 734 (2014) 406-406 (erratum) • e-Print: 1307.1427 • DOI: 10.1016/j.physletb.2014.05.011

CP-odd Higgs boson production in eγcollisions

File / Name	License
2018PLB781(2018)290.pdf	
2018PLB781(2018)290.pdf (649.8KB) [170 downloads]	

OAI-PMH BibTeX OWL

アイテムタイプ	学術雑誌論文 / Journal Article
言語	英語
キーワード	CP-odd Higgs production, Two-photon fusion, Transition form factor, eγ-collisions
著者	Sasaki Ken Uematsu Tsuneo
著者所属	Dept. of Physics, Faculty of Engineering,Yokohama National University Institute for Liberal Arts and Sciences, Kyoto University, Maskwa Institute, Kyoto Sangyo University
抄録	We investigate the CP-odd Higgs boson production via two-photon processes in eγcollisions. The CP-odd Higgs boson, which we c appear in the Two-Higgs Doublet Models (2HDM) as a minimal extension of Higgs sector for which the Minimal Supersymmetric S special case. The scattering amplitude for eγ→eA0is evaluated at the electroweak one-loop level. The dominant contribution come when A0boson is rather light and tanβis not large. There are no contributions from the W-boson and Z-boson loops nor the scalar differential cross section for the A0production is analyzed.
雑誌名	Physics Letters B
巻	781
ページ	290 - 294
発行年	2018-06-10
ISSN	03702693
書誌レコードID	AA11537044
DOI	info:doi/10.1016/j.physletb.2018.04.005
権利	©2018 The Author(s). Published by Elsevier B.V. This is an open access article under the CC BY license (http://creativecommons. Funded by SCOAP3.
著者版フラグ	publisher
出版者	Elsevier

Mission

- Providing novel insight to realise remote curation from Japan
- Finding the key issue and solutions

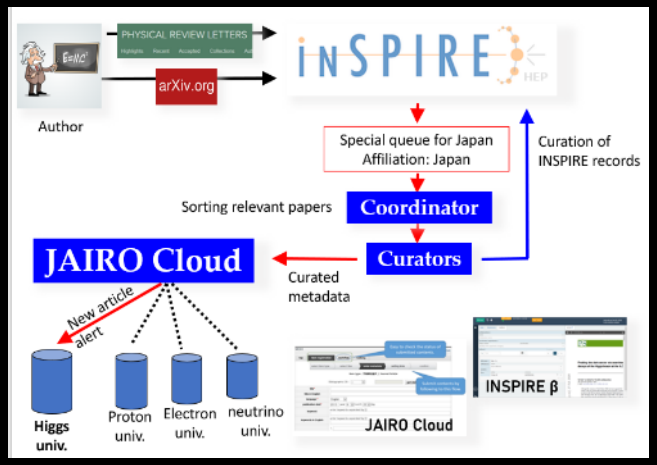
by

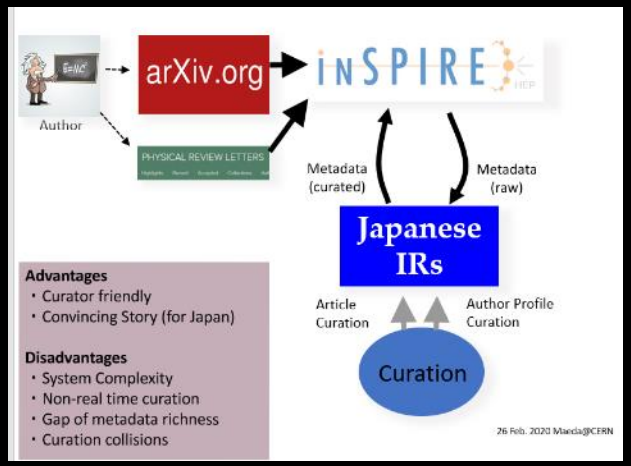
- Proposing new model (beneficial for both)
- Determining how Japan can collaborate with INSPIRE curation (author disambiguation)

Curation “through” JAIRO Cloud

Let’s see if it works…

Trial & error





Info. from French model (IN2P3)

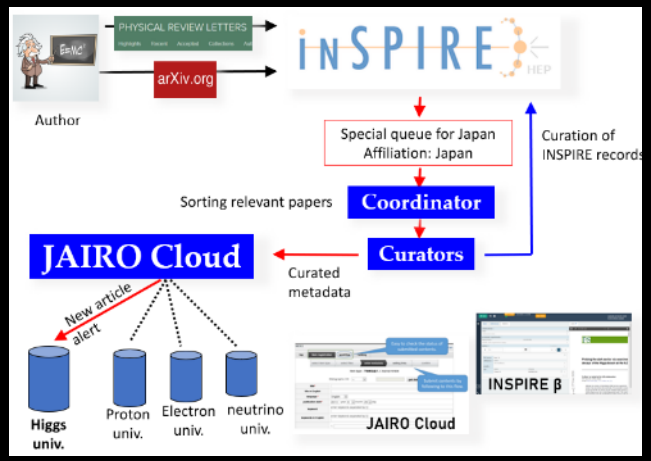
Based on 2010-2016 experience:

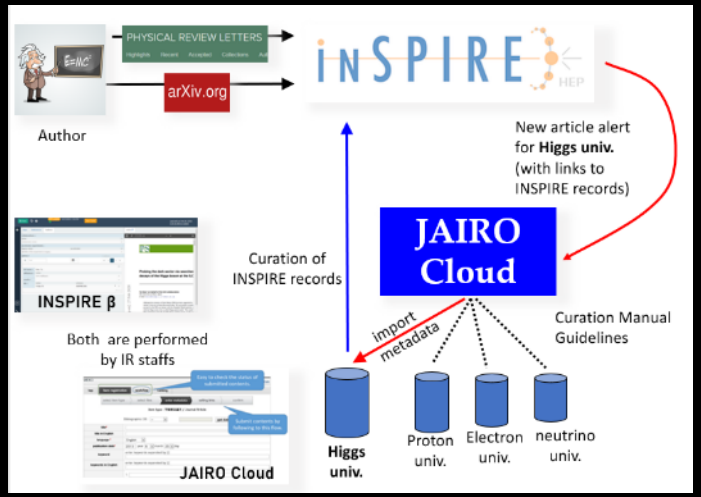
5000 papers/year
600 affiliations

2 FTE curators
1 coordinating curator (80 % of time for curation)
8 curators (10-20 % of time for curation)
(If more effective, 3-4 curators are reasonable (30 % of time for curation))

Curators use their own ORCID to login to INSPIRE
Some guidelines are translated into French

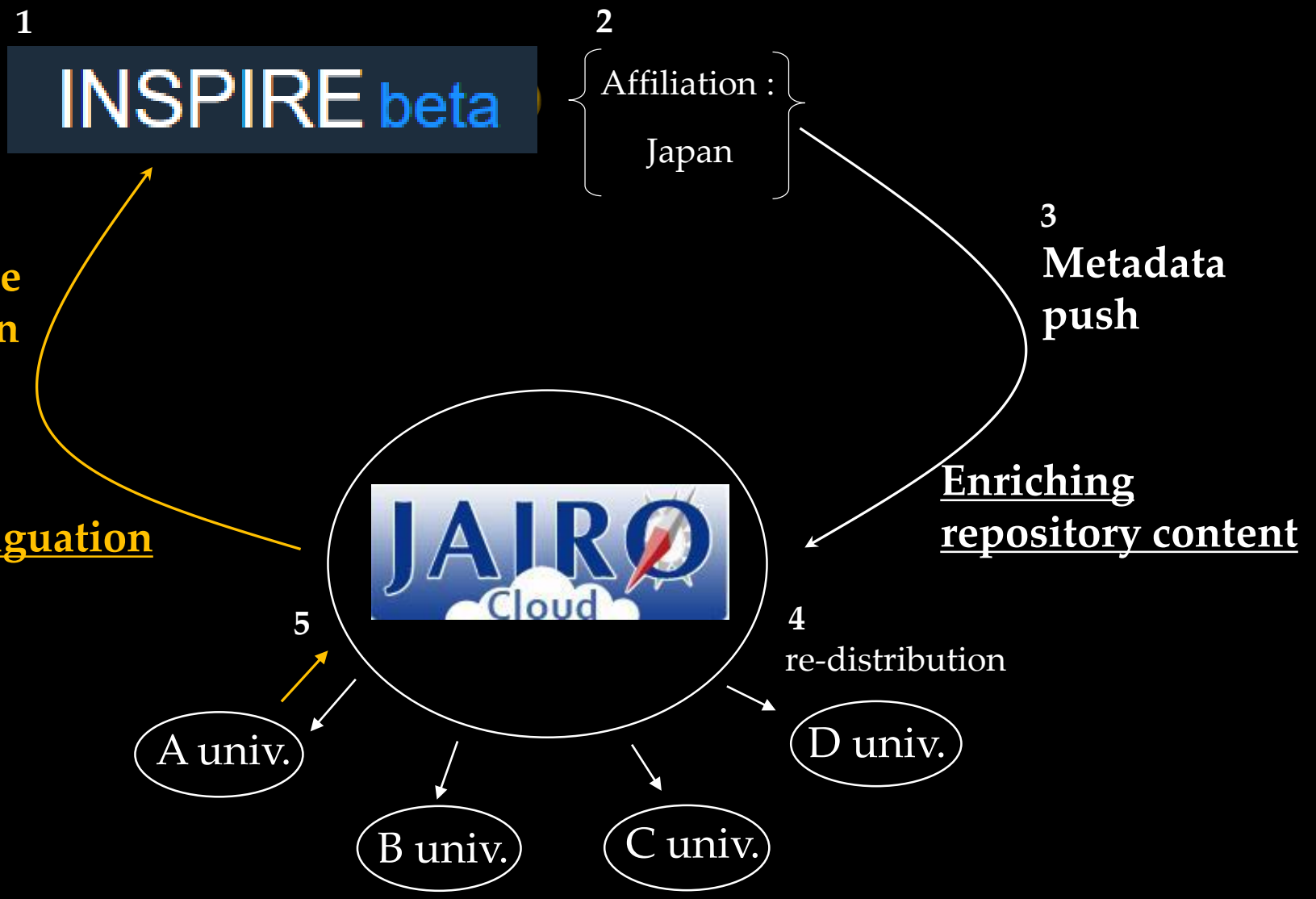
Last but not least, curators understand what they are serving for. It's not simply for their own repository but for accelerating the science itself (by help HEP community with well maintained database, i.e., INSPIRE)





Circulation model

- Curation of INSPIRE records through JAIRO Cloud
- Metadata of new HEP papers pushed into Japan's IRs



Experiments

Metadata

INSPIRE

INSPIRE beta

Curation

JAIRO Cloud

Data Centre

Curators' Competencies

OK: without HEP background
OK: new to curation

Open and Welcome

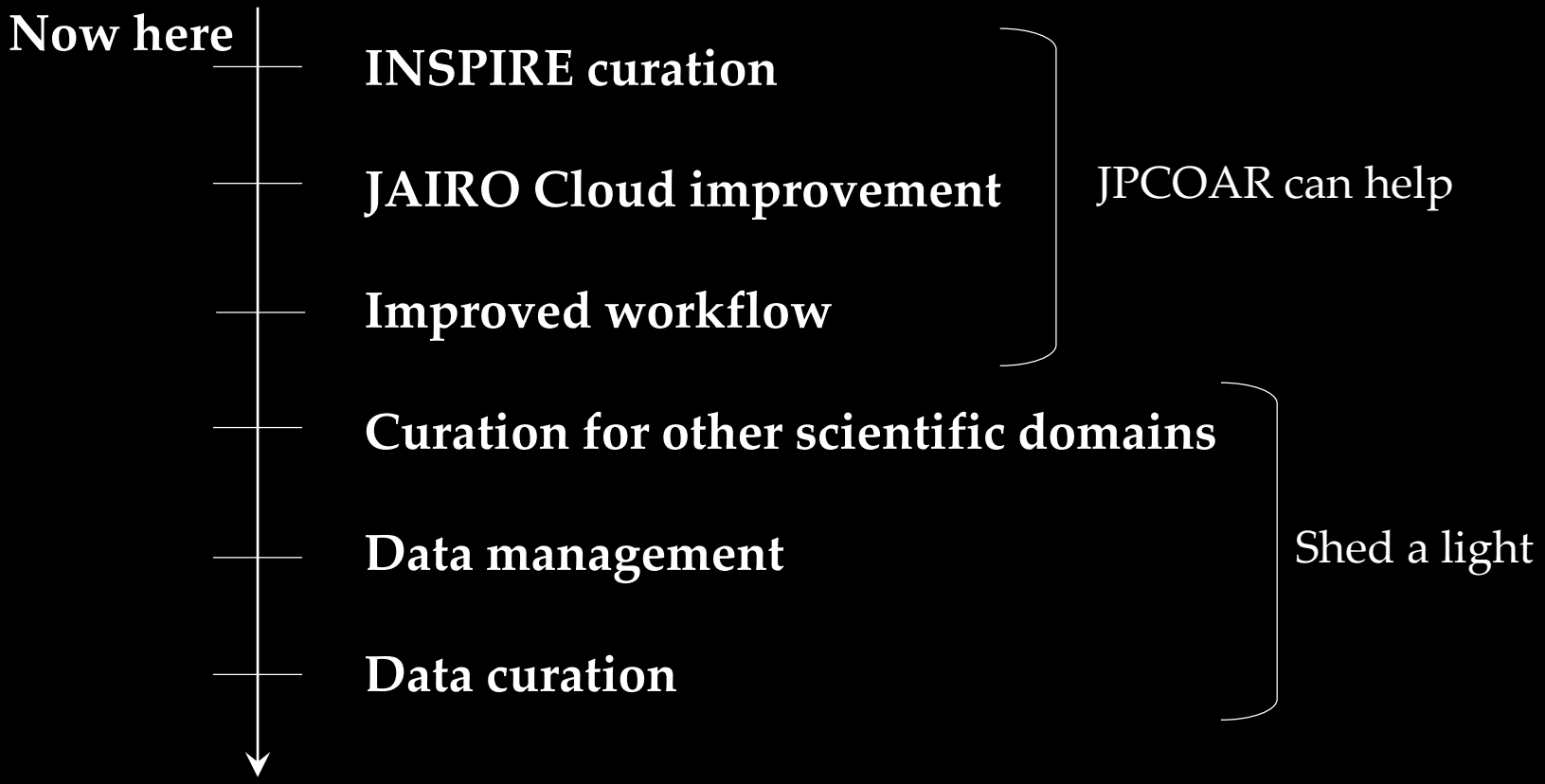
Contribution

Why not join?

INSPIRE Collaboration

Looking at Future

Positive Side Effects (Future Application)



Curators = Librarians

We can accelerate science!

Last but not least, I am grateful to NII, CERN, and all of those involved to make this visit happen.

At the same time, it is of my great responsibility to make this opportunity the first step of a ladder for a future collaboration between NII and CERN, altogether for accelerating science.


Thank you for your attention.
-END-