



CERN

European Organization for Nuclear Research

Organisation Européenne pour la Recherche Nucléaire

# Le Service d'Information Scientifique

## 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.

Convention establishing a European Organization for Nuclear  
Research, 1953

CERN Onboarding 2019

Tullio Basaglia, RCS-SIS



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## La mission du SIS:

- Le Service d'information scientifique du CERN a pour mission de gérer, conserver et diffuser efficacement l'information scientifique afin de la rendre accessible et utilisable pour le CERN et pour la communauté mondiale de la physique des hautes énergies.
- 4 domaines d'activité: la Bibliothèque, la base de données INSPIRE, les Archives, l'Open Science



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## La Bibliothèque :

- Assure que l'information scientifique produite au CERN soit préservée et généralement accessible
- Distribue les publications CERN (“Rapports jaunes”, CERN Courier, publications du Particle Data Group)
- Donne accès aux ressources d'information dans tous les domaines d'intérêt pour le CERN: physique, informatique, mathématiques, ingénierie, gestion



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## Notre offre:

- 150,000 livres et comptes rendus de conférences, dont 100,000 en format électronique
  - 2,000 journaux en ligne
  - 13,500 normes techniques
- CERN Document Server: c'est là que vous trouvez ce que nous avons en stock: [cds.cern.ch](http://cds.cern.ch)
- Accessible de partout dans le monde – consultez les instructions ici: <http://library.cern/resources/remote>
- « Acquisition guidée par le lecteur » : suggérez des nouvelles acquisitions: <http://library.cern/services/suggest>



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## (E)books and proceedings

Title	How mathematicians think : using ambiguity, contradiction, and paradox to create mathematics
	
Author(s)	<a href="#">Byers, William</a>
Imprint	Princeton, NJ, Princeton Univ. Press, 2007. - 415 p.
Price(s)	25.00CHF
	<a href="#">Purchase from CERN Bookshop</a> ← <b>Purchase</b>
Subject category	Mathematical Physics and Mathematics
	This book on <a href="#">Google Books</a> ← <b>Preview</b>
Contact	<a href="mailto:bookshop@cern.ch">bookshop@cern.ch</a>
	<a href="#">CERN library copies</a> ← <b>Loan / Request</b>
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## En plus des collections de la Bibliothèque

- Le **Bookshop** est à votre disposition dans les locaux de la Bibliothèque
  - Vous pouvez acheter un livre pour vous ou pour votre groupe
  - Paiement par carte de crédit ou cash ou budget code (EDH)
  - Nous achetons n'importe quel livre pour vous (aussi des titres qui ne sont plus en stock chez l'éditeur)

1-10-26 10:44

**LHC / Ginter, Peter**  
Baden : Lammerhuber, 2011. - 264 p.  
[Purchase from CERN Bookshop - CERN library copies](#)

[This look at Amazon](#)

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Buy	SCEM Code	Unit	Unit Price	Stock	Expected Delivery	Direct Delivery	Title
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### •Prêt entre bibliothèques

- Livres, articles, normes, thèses...: nous pouvons les obtenir pour vous!
- Gratuit, rapide (il faut quelques heures pour un article en PDF)
- Taux de réussite très élevé (>95%)



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## INSPIRE:

CERN, DESY, Fermilab and SLAC have built the next-generation High Energy Physics (HEP) information system, INSPIRE. It combines the successful SPIRES database content, curated at DESY, Fermilab and SLAC, with the Invenio digital library technology developed at CERN. INSPIRE is run by a collaboration of CERN, DESY, Fermilab, IHEP, IN2P3, and SLAC, and interacts closely with HEP publishers, arXiv.org, NASA-ADS, PDG, HEPDATA and other information resources.



*Institute of High Energy Physics  
Chinese Academy of Sciences*



Tullio Basaglia  
CERN Onboarding  
2019

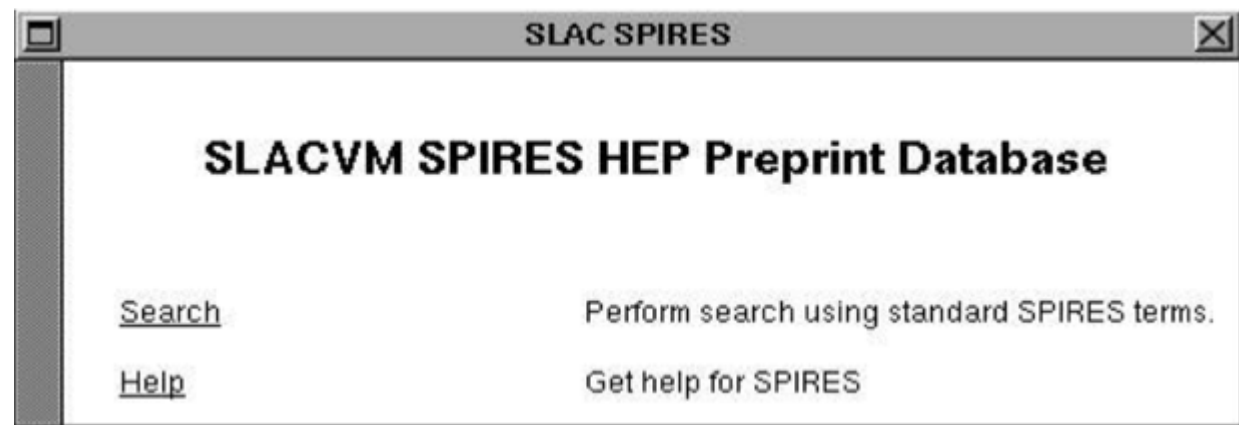


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## INSPIRE:

1991: First website in North America (after the Web was born at CERN)



Institute of High Energy Physics  
Chinese Academy of Sciences



Tullio Basaglia  
CERN Onboarding  
2019



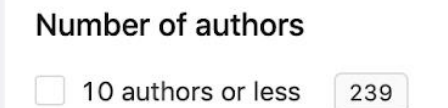
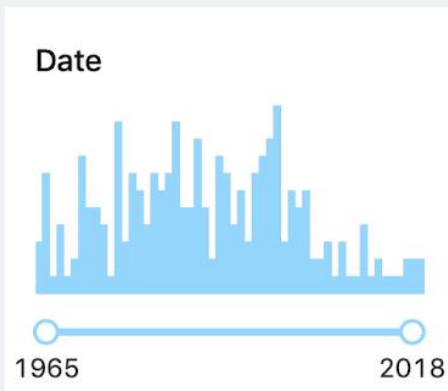


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In 2019, we launched INSPIRE beta to replace the current INSPIRE in 2020.

Visit <https://beta.inspirehep.net/> and send us your feedback!



239 results | [cite all](#) Most Recent

**Black Hole Entropy and Soft Hair** #1

Sasha Haco (Cambridge U., DAMTP and Harvard U. and Radcliffe Coll.),  
 Stephen W. Hawking (Cambridge U., DAMTP and Harvard U. and Radcliffe Coll.),  
 Malcolm J. Perry (Cambridge U., DAMTP and Harvard U. and Radcliffe Coll.),  
 Andrew Strominger (Harvard U.) (Oct 3, 2018)

Published in: *JHEP* 12 (2018) 098 • e-Print: [1810.01847](https://arxiv.org/abs/1810.01847) [hep-th]

[pdf](#) [DOI](#) [cite](#) [↻](#) 40 citations

**Should China build the Great Collider?** #2

Stephen Hawking (Cambridge U., DAMTP), Gordon Kane (Michigan U., MCTP) (Apr 2, 2018)

# **INSPIRE and CDS: what is the difference?**

- INSPIRE covers HEP literature worldwide (mainly articles and preprints)
- CERN Document Server focuses on CERN output and provides access to the collections of the Library and to the Bookshop's stock



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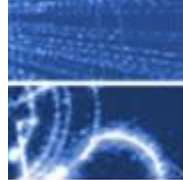
Organisation Européenne pour la Recherche Nucléaire

## The Archive:

The CERN Archive is a repository for historical records about all aspects of CERN's activities, from the creation of CERN until the present day. The CERN Archive includes files of letters, memos, reports, notes and other documents created or received in the course of their duties by former Directors-General and other senior staff, by the CERN Council and subordinate Committees, by CERN Departments, and by selected Experiments and Committees. In addition to the CERN fonds, it also contains the Wolfgang Pauli Archive, a collection of correspondence, manuscripts and other material representing the scientific legacy of Wolfgang Pauli (Nobel Laureate, 1945). See: <http://library.cern/archives>



Dear Radioactive Ladies and Gentlemen,



As the bearer of these lines, to whom I graciously ask you to listen, will explain to you in more detail, because of the "wrong" statistics of the N- and Li-6 nuclei and the continuous beta spectrum, I have hit upon a desperate remedy to save the "exchange theorem" (1) of statistics and the law of conservation of energy. Namely, the possibility that in the nuclei there could exist electrically neutral particles.

OFF  
Gauvereins-Tagung

Abschrift

Physikalisches Ins-  
der Eidg. Technisc  
Zürich

Liebe Radio

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des kontinuierlich  
verfallen um den '  
zu retten. Nämlic  
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welche den Spin 1/  
sich von Lichtquar  
nicht mit Lichtges  
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beta-Zerfall mit  
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44 wohl nicht grö

Ich traue  
zu publizieren un  
Radioaktive, mit  
eines solchen Neu  
lOmal grösseres D  
gamma-Strahl.

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wenig wahrscheinl  
sie existieren, w  
gestimmt und der E  
wird durch einen  
Herrn Debye, beleuchtet, der mir kürzlich in Brüssel gesagt hat:  
"0, daran soll man am besten gar nicht denken, sowie an die neuen  
Steuern." Darum soll man jeden Weg zur Rettung ernstlich diskutieren.-  
Also, liebe Radioaktive, prüfet, und richtet.- Leider kann ich nicht  
persönlich in Tübingen erscheinen, da ich infolge eines in der Nacht  
vom 6. zum 7. Dez. in Zürich stattfindenden Balles hier unabhkümlich  
bin.- Mit vielen Grüßen an Euch, sowie an Herrn Baek, hier  
untertänigster Diener

ges. W. Pauli

WESTERN UNION (109)  
A. N. WILLIAMS  
PRESIDENT

CLASS OF SERVICE  
This is a full-rate Telegram or Cablegram unless its deferred character is indicated by a suitable symbol above or preceding the address.

SYMBOLS  
DL = Day Letter  
NL = Night Letter  
LC = Deferred Cable  
NLT = Cable Night Letter  
Ship Radiogram

NZ252 INTL=CD STOCKHOLM VIA RCA 25 15 2020  
PROFESSOR WOLFGANG PAULI PRINCETON UNIVERSITY=  
=PRINCE TONNJER=  
ROYAL SWEDISH ACADEMY OF SCIENCE HAS AWARDED YOU THE NOBEL  
PRIZE IN PHYSICS 1945 STOP LETTER FOLLOWS=  
=WESTGREN SECRETARY.

1945

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

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WITH EXPECTED SIX  
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NEUTRINOS FROM FISSION FRAGMENT  
OF PROTONS OBSERVED CROSS SECTION AGREES WELL  
TIMES TEN TO MINUS FORTY FOUR SQUARE CENTIMETERS  
FREDERICK REINES AND CLYDE COWAN  
BOX 1663 LOS ALAMOS NEW MEXICO



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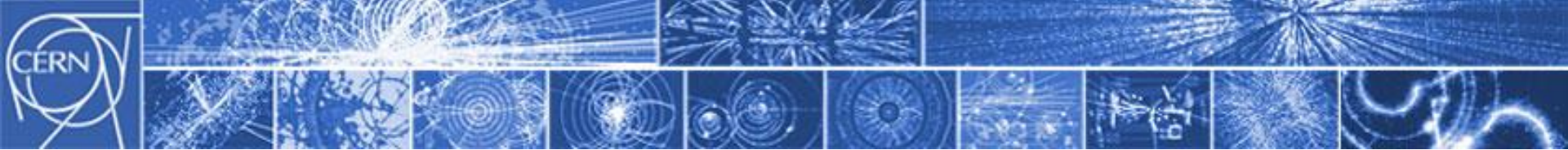
CERN Analysis Preservation

## Open Science:

- SCOAP<sup>3</sup>: Sponsoring Consortium for Open Access Publishing in Particle Physics
- Freya: extending the infrastructure for persistent identifiers (PIDs)
- CAP: CERN Analysis and Preservation and REANA: REproducible research data ANalysis platform

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





# SCOAP<sup>3</sup> – the largest Open Access initiative

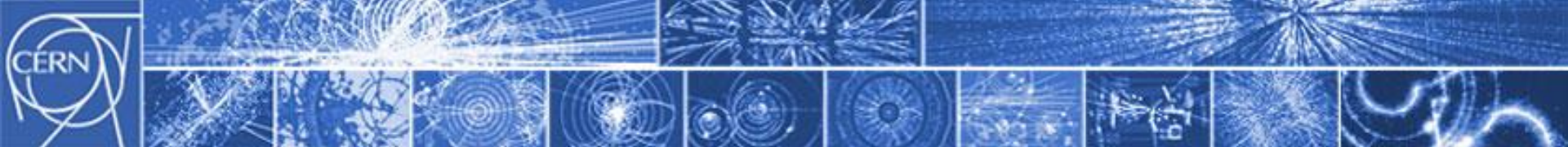
- SCOAP<sup>3</sup> (Sponsoring Consortium for Open Access Publishing in Particle Physics) makes ~90% of HEP journal articles OA
- 3,000 partner libraries from 44 countries and 3 IGO's
- 7,000 articles/year in 11 journals
- Partner libraries redirect funds previously used to pay subscriptions
- CERN is host organization and contractual counterpart of all stakeholders



# FREYA Project

- Connected Open Identifiers for Discovery, Access and Use of Research Resources
- 3-year project: 2017-2020, funded under Horizon 2020
- Extend the infrastructure for persistent identifiers (PIDs) as a core component of open global research
- Improve data discovery by extending and cross-linking PID core services, build on existing PID infrastructure (Crossref, DataCite, ORCID and identifiers.org).
- Extend potential of PIDs by designing, developing and delivering innovative services for data discovery, resource identification and provenance tracking.
- Integrate the PID Graph in disciplinary contexts and the European Open Science Cloud (EOSC) via disciplinary demonstrator systems.
- Sustaining an open and trusted PID e-infrastructure provision for the benefit of the research community within the EU and globally.





# CERN Analysis Preservation – preserve the entire research process

- Platform that enables the High-Energy Physics community to preserve and share their research objects (data, code, notes,...)
- Piloted in collaboration with all the major LHC experiments
- Versioning of data & code, using the publishing draft/record model
- Integration with related scientific services and universal identifiers (i.e. ORCID, ROR)
- Ongoing integration with CERN services that support remote execution and reuse (e.g. REANA)

**Full reproducibility mode** please turn this mode on if you want to capture additional information about main and auxiliary measurements, systematic uncertainties, background estimates, final state particles

**Basic Information**  
Please provide some information relevant for all parts of the Analysis here

**Information from CADI database**  
Automatically taken from CADI, based on CADI ID

**Input Data**  
Please list all datasets and triggers relevant for your analysis here

**N-tuples Production [0 items]**  
Provide details on the intermediate n-tuples production

**Auxiliary Measurements [0 items]**  
Provide details on auxiliary measurements used in the analysis

**Background Estimation [0 items]**  
Details on the background estimation methods

**Final Results**  
Please provide information necessary to generate final plots and tables for your analysis.

**Main Measurements Workflows [0 items]**  
Please provide information about the main measurements of your analysis

