

Digital Repositories @ CERN

FCCIS Kickoff Meeting

Jose Benito Gonzalez Lopez
IT-CDA-DR

The Future Circular Collider Innovation Study (FCCIS) project has received funding from the European Union's Horizon 2020 research and innovation programme under grant No 951754.

Digital Repositories Section

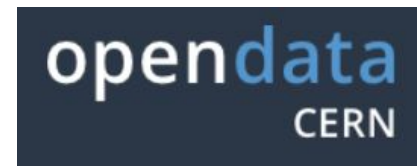
Developing Open Source software

Running institutional and multidisciplinary repositories

Building Open Science Infrastructure



zenodo.org



opendata.cern.ch

CERN Document Server

Access articles, reports and multimedia content in HEP

cds.cern.ch



reana.io

Invenio

Open Source; Successfully used by >70 production services

Zenodo

CDS
CDS Videos
Library Loans

CERN
Open Data

CERN
Analysis
Preservation

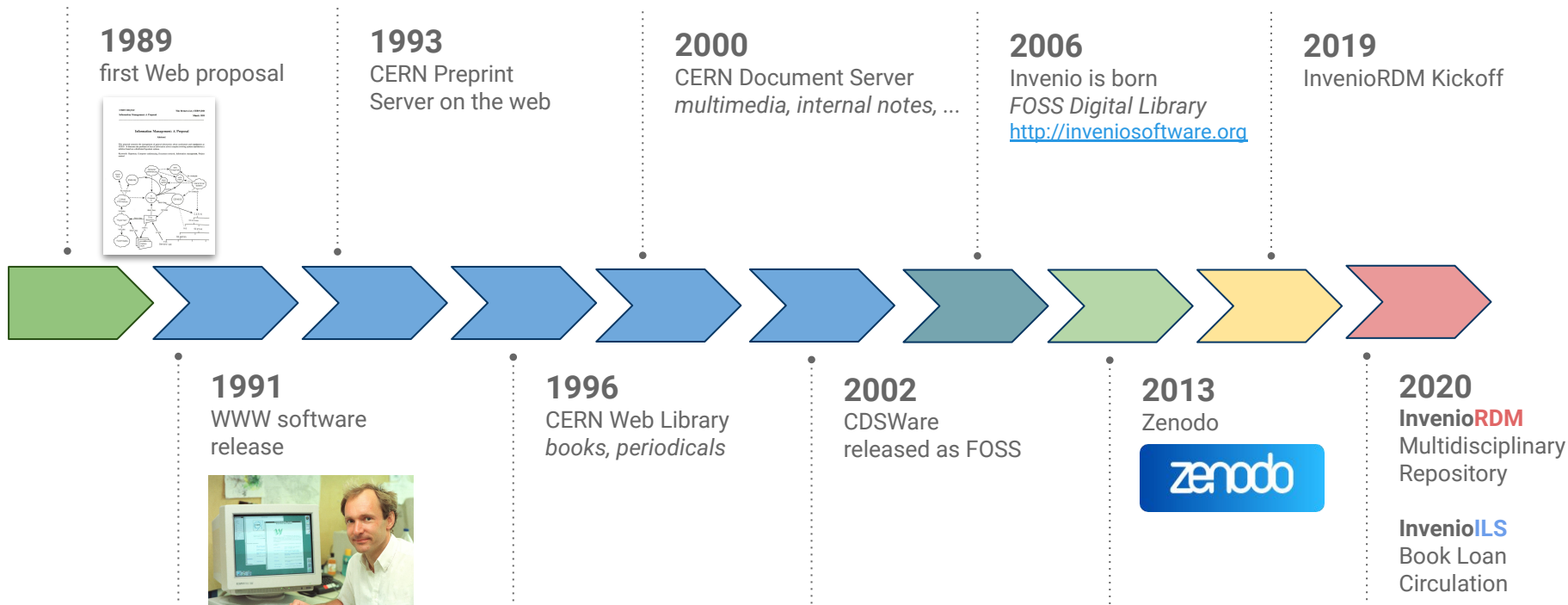
INSPIRE

Many more



INVENIO
Powering Open Science

Expertise in preservation



Digital Repositories



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CERN Document Server

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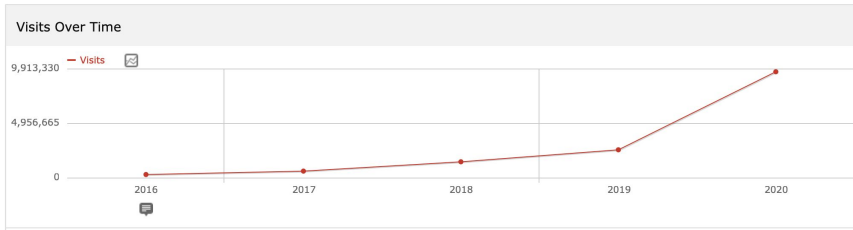


Zenodo

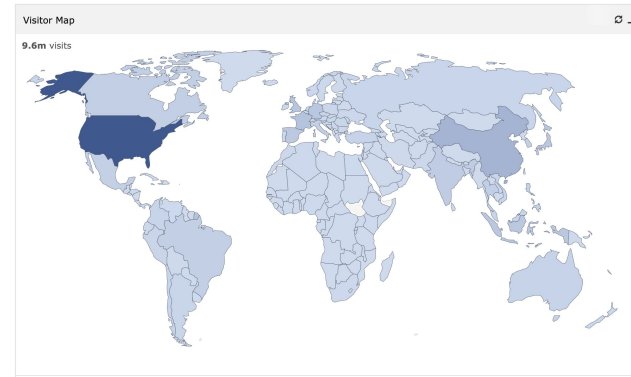
zenodo.org

Zenodo - Stats

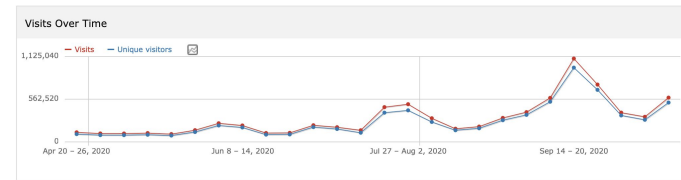
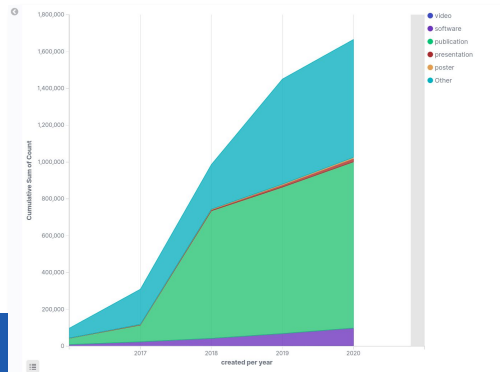
Yearly: 9.6 million in 2020 >4 times more than 2019!



Records per year
(total: >1.7M)



Weekly up to Oct 2020



Upload, Describe, Share



Recent uploads

September 16, 2019 (v12) Dataset Open Access

Binary black-hole surrogate waveform catalog

Scott E. Field, Chad R. Galley, Jan S. Hesthaven, Jason Kaye, Manuel Tiglio, Jonathan Blackman, Béla Szilágyi, Mark A. Scheel, Daniel A. Hemberger, Patricia Schmidt, Rory Smith, Christian D. Ott, Michael Boyle, Lawrence E. Kidder, Harald P. Pfeiffer, Vijay Varma

This repository contains all publicly available numerical relativity surrogate data for waveforms produced by the Spectral Einstein Code. The base method for building surrogate models can be found in Field et al., PRX 4, 031006 (2014). Several numerical relativity surrogate models are currently...

Uploaded on January 28, 2020

11 more version(s) exist for this record

January 24, 2020 (v0.10.0) Software Open Access

mwaskom/seaborn: v0.10.0 (January 2020)

Michael Waskom; Olga Botvinnik; Joel Ostblom; Saulius Lukauskas; Paul Hobson; Maoz Gelbart; David C Gemperline; Tom Augspurger; Yaroslav Halchenko; John B. Cole; Jordi Warmenhoven; Julian de Ruijter; Cameron Pye; Stephan Hoyer; Jake Vanderplas; Santi Villalba; Gero Kunter; Eric Quintero; Pete Bachant; Marcel Martin; Kyle Meyer; Corban Swain; Alistair Miles; Thomas Brunner; Drew O'Kane; Tal Yarkoni; Mike Lee Williams; Constantine Evans

This is a major update that is being released simultaneously with version 0.9.1. It has all of the same features (and bugs) as 0.9.1, but there are important changes to the dependencies. Most notably, all support for Python 2 has now been dropped. Support for Python 3.5 has also been dropped...

Uploaded on January 28, 2020

9 more version(s) exist for this record

January 25, 2020 (v0.3.15) Software Open Access

Colour 0.3.15

Mansencal, Thomas; Mauderer, Michael; Parsons, Michael; Shaw, Nick; Wheatley, Kevin; Cooper, Sean; Vandenberg, Jean D.; Canavan, Luke; Crowson, Katherine; Lev, Ofek; Leinweber, Katrin; Sharma,

Upload type: required

Publication Poster Presentation Dataset Image Video/Audio Software Lesson Other

Publication type: Journal article

Zenodo now supports usage statistics!

Read more about it in our newest blog post.

Using GitHub?

Check out our GitHub integration. Software Preservation Made Simple!

Zenodo in a nutshell

- Research. Shared.** – all research outputs from across all fields of research are welcome! Sciences and Humanities, really!
- Citable. Discoverable.** – uploads gets a Digital Object Identifier (DOI) to make them easily and uniquely citeable.
- Communities** – create and curate your own community for a workshop, project, department, journal, into which you can accept or reject uploads. Your own complete digital repository!
- Funding** – identify grants, integrated in reporting lines for research funded by the European Commission via OpenAIRE.
- Flexible licensing** – because not everything is under Creative

Closed (26057)

Restricted (2020)

Embargoed (828)

File Type

- Pdf (786933)
- Jpg (347467)
- Png (169568)
- Zip (55589)
- Hdf5 (15073)
- Xml (10772)
- Docx (8454)
- Txt (5718)
- Gz (5002)
- Html (4950)

Keywords

- Taxonomy (466379)
- Biodiversity (464862)

Page navigation: 1 2 3 4 5 6 7 8 9

Sort by: Most recent asc.

View

Political Stability and Absence of Violence/Terrorism on foreign direct investment flows in the Arab countries.

EBRAHIM ABDULRAHMAN, AL-DAKHLI ABDULLAH HAMID ABDULLAH SAIF,

Foreign direct investment is considered one of the main sources of any economy. Countries seek to attract foreign direct investment flows to them. This results in the improvement of the economy, the transfer of technology and the foreign currency of the host country and the provision of employment o

Uploaded on February 3, 2020

January 31, 2020 (v2) Journal article Open Access

De l'ajustement structurel à la transformation structurelle : bonnes pratiques africaines

EL GHAZI Imane, BAHYAOUI Salwa,

Après l'indépendance de la majorité des pays africains aux alentours de 1960, et après deux décennies de pauvreté et de dérapages économiques, les problèmes de financement demeurant toujours un handicap majeur pour la mise en

Uploaded on February 3, 2020

1 more version(s) exist for this record

January 31, 2020 (v1) Journal article Open Access

Examining Factors in 2015 TIMSS Australian Grade 4 Student Questionnaire Regarding Attitudes Towards Science Using Exploratory Factor Analysis (EFA)

Wai Wai Kyi,

Abstract: This study is based on the result from student questionnaire about Grade 4 Australian students' attitudes towards science. The respondents for this study are (n=6009) students who responded to TIMSS 2015 student questionnaire and the instrument which is chosen for this study is the se

Uploaded on February 3, 2020



Examples of Datasets in Zenodo

COVID-19 CT Lung and Infection Segmentation Dataset

April 20, 2020

4,486 views | 6,920 downloads

Tweeted by 4

Indexed in **OpenAIRE**

Medical

Raw diffraction data for structure of SARS-CoV-2 main protease with Z1271660837 (ID: mpro-x1226 / PDB: 5RFB)

March 30, 2020

257 views | 23 downloads

Indexed in **OpenAIRE**

Biological

Linked COVID-19 Data: Johns Hopkins University (JHU) and European Centre for Disease Prevention and Control (ECDC)

May 18, 2020

3,178 views | 645 downloads

Indexed in **OpenAIRE**

Standardization

Crowdsourced air traffic data from the OpenSky Network 2020

May 1, 2020

939 views | 179 downloads

Tweeted by 16

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Transports

European airports: EDDF, EGLL, EHAM, LEMD, LPFG, LIRF, LSZH, UUEE

of departing flights

February | March | April | May | June | July | August | September | October

number: the combinatorial number of the flight, when available (the matching with the callsign comes from public open API);
 icao24: the transponder unique identification number;
 registration: the aircraft tail number (when available);
 typecode: the aircraft model type (when available);
 origin: a four letter code for the origin airport of the flight (when available);
 destination: a four letter code for the destination airport of the flight (when available).

Reference



zenodo

Search [input] Upload Communities

April 23, 2018

FAIR Data Advanced Use Cases: from principles to practice in the Netherlands

15,337 views 1,573 downloads

OpenAIRE

Publication date: April 23, 2018

DOI: 10.5281/zenodo.1250135

Keywords: FAIR data, open science, open policy

License (for files): Creative Commons Attribution 4.0 International

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INTRODUCTION 4

THE FAIR DATA GUIDING PRINCIPLES 6

1. TU DELFT 7

2. KNMI 15

Cite all versions? You can cite all versions by using the DOI

zenodo

Search [input]

There is a newer version of this record available.

Versions

Version 3	10.5281/zenodo.999150	Sep 29, 2017
Version 2	10.5281/zenodo.803266	Jun 6, 2017
Version 1	10.5281/zenodo.35177	Dec 10, 2015

Cite all versions? You can cite all versions by using the DOI 10.5281/zenodo.620228. This DOI represents all versions, and will always resolve to the latest one. Read more.

Citations 159

Show only: Literature (153) Unknown (6) Dataset (0) Software (0)

Search [input]

Localization of Compact Binary Sources with Second-generati...	2020	ADS ARXIV DOI
Random Forest Model of Ultra-low-Frequency Magnetospheric Wa...	2020	ADS DOI
On the intermittency of orographic gravity wave hotspots a...	2020	ADS DOI
The Southern Stellar Stream Spectroscopic Survey (S S): Cha...	2020	ADS ARXIV DOI
GLM and ABI Characteristics of Severe and Convective Storms	2020	ADS DOI
The early growth of supermassive black holes in cosmologica...	2020	ADS ARXIV DOI
Empirical Relationship between Calcium Triplet Equivalent W...	2020	ADS DOI
A Population-Informed Mass Estimate for Pulsar J0740+6620	2020	ADS ARXIV DOI
Drivers of concentrated predation in an Antarctic marginal...	2020	ADS DOI
Cloud Identification from All-sky Camera Data with Machine ...	2020	ADS ARXIV DOI

Page size: [dropdown]

<https://zenodo.org/record/3767970>



Communities

Projects, Subjects, Institutes, Nations, Conferences, ...

The image shows three overlapping screenshots of the Zenodo website. The top screenshot is for 'LORY - Lucerne Open Repository', showing a search bar and 'Recent uploads'. The middle screenshot is for 'TWISTx Proceedings', also showing a search bar and 'Recent uploads'. The bottom screenshot is for 'Knowledge Junction', which includes a search bar, a list of recent uploads (e.g., 'Chemical Monitoring Reporting Guidelines (SSD2)', 'Concept paper on the future of data in EFSA'), and a 'New upload' button. A yellow arrow points from the 'New upload' button to the EFSA logo in the 'Knowledge Junction' community page.

This screenshot shows a Zenodo community page for 'Software Carpentry'. It features a header with the community name and a sub-header 'Materials published by Software Carpentry'. Below this, it lists 'The most recent upload:' with a 'View' button. The upload details include the date '13 May 2019', a 'License' dropdown, and an 'Open access' badge. The title of the upload is 'Software Carpentry: Using Databases and SQL' by Allen, James; Andrea, Paula; Baraszkewicz, Piotr; Barnaby, Pauline, et al. A short description follows: 'A half-day introduction to using databases and SQL for researchers, developed and maintained by the Software Carpentry team.' The upload date is 'Uploaded by swarcarpentry on 12 August 2019.'

Want your own community? [Sign Up](#)

It's easy. Just sign-up and create a new community.

- **Curate** – accept/reject what goes in your community collection.
- **Export** – your community collection is automatically exported via OAI-PMH
- **Inlined** – not custom inlined link to card to

Accept Reject

This screenshot shows a news article on the EFSA website. The article is dated '17 January 2019' and is titled 'EFSA to share data on open-access platform'. It features a large image of a keyboard with a green 'Access' key. Below the image, the text states: 'EFSA has taken a major step towards becoming a fully open data organisation by committing to publish the scientific data it uses for EU-wide monitoring programmes and surveys and many of its risk assessments. In a report published today, EFSA lays out how it intends to share data collected in areas such as: food consumption habits; pesticide residues in food; chemical contaminants and additives in food; foodborne disease outbreaks; and antimicrobial resistance.'

X





Archive: GitHub integration

The screenshot shows the GitHub repository page for 'decouple'. The repository name 'decouple' is highlighted with a yellow box. Below the repository name, the DOI '10.5281/zenodo.8345' is also highlighted with a yellow box. A yellow arrow points from this box to the Zenodo interface on the right.

The screenshot shows the Zenodo record page for a paper titled 'Elastic frictional contact problem for arbitrary surface shapes and arbitrary 2D loading history: method of memory diagrams'. The DOI '10.5281/zenodo.8345' is highlighted with a yellow box. A yellow arrow points from this box to the GitHub repository on the left. Another yellow arrow points from the Zenodo DOI box to a central box containing the DOI 'DOI: 10.5281/zenodo.8345'. The Zenodo page also shows the 'Publication date' as February 13, 2014, and the 'Communities' section including 'OpenAIRE'.

DOI: 10.5281/zenodo.8345

CDS

cds.cern.ch

CERN Accelerating science

CERN Document Server

Access articles, reports and multimedia content in HEP

Search Submit Help Personalize

Search 679,246 records for:

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Articles & Preprints (431,493)

Published Articles (184,551) Preprints (138,030) Theses (9,455) Reports (6,456)
CERN Notes (79,601) Committee Documents (28,261)

Books & Proceedings (154,327)

Books (116,361) Proceedings (13,943) Standards (13,765) Design Reports (239)

Presentations & Talks (18,874)

Conference Announcements (7,344) Academic Training Lectures (883)
Summer Student Lectures (1,547) General Talks (9,098) E-learning modules (54)

Periodicals & Progress Reports (2,421)

Periodicals (2,342) Progress Reports (79)

Multimedia & Outreach (108,795)

Photos (18,490) Press (71,259) Audio Archives (504) Exhibition Objects (337)
Posters (1,352) Brochures (246) HEP Institutes (2,985)
Experiments at CERN (1,259) Education and Outreach Resources (131)
Video Lectures (12,288) Graphics (13)

Videos collection has been moved to: [videos.cern.ch](#)

CERN Articles & Preprints (229,010)

CERN Published Articles (101,160) CERN Preprints (22,238) CERN Theses (9,279) CERN Reports (1,973) CERN Notes (79,601) Committee Documents (28,261)

CERN Series (35,692)

CERN Annual Reports (130) CERN Yellow Reports (1,206) CERN Yellow Report Articles (7,527) CERN Theory (15,543) Academic Training Lectures (883)
Summer Student Lectures (1,547) General Talks (9,098)

CERN Departments (302,698)

Physics (EP) (28,658) Research & Computing Sector (141,444) Theoretical Physics (TH) (15,308) Information Technology (IT) (81,911)
Accelerators & Technology Sector (23,920) Beams Department (BE) (1,682) Engineering Department (EN) (663) Technology Department (TE) (205)
Directorate Services Unit (29,768) International Relations (90,495) Procurement and Knowledge Transfer (16,930) Human Resources (HR) (1,536)
Finance and Administrative Processes (FAP) (72) Pension Fund (0)

CERN Accelerators (34,680)

All CERN Accelerators documents (29,947) PS Complex (2,166) SPS and CNGS (7,827) LHC (4,922) Projects, Upgrade and Consolidation Projects (405)
R&D and Studies (290) EU Funded Projects (1,246) Decommissioned Facilities (2,843) Accelerators and Facilities outside CERN (18)
Technologies, Systems, Accelerator Physics and Processes (5,771)

CERN Experiments (100,159)

LHC Experiments (82,628) LEP Experiments (10,610) SPS Experiments (1,634) PS Experiments (740) ISOLDE (3,331) MEDICIS Internal Notes (27)
Recognized Experiments (837) CERN Test Beams (663)

CERN R&D Projects (4,790)

EU Projects (3,259) CERN Detector R&D Projects (748) CERN Accelerator R&D Projects (1,454)



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Home > Articles & Preprints > Published Articles

Published Articles

Search 184,554 records for:

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Latest additions:

2020-11-11
1625 **Test results of ATLASPIX3 – A reticle size HVCMOS pixel sensor designed for construction of multi chip modules / Schimasek, R. (KIT, Karlsruhe); Andreatta, A. (INFN, Milan - Milan U); Augustin, H. (Heidelberg U); Barbero, M. (Marseille, CPPM); Benoit, M. (Geneva U); Ehlers, F. (KIT, Karlsruhe); Iacobucci, G. (Geneva U); Meneses, A. (Heidelberg U); Pangaud, P. (Marseille, CPPM); Prathapan, M. (KIT, Karlsruhe) et al.** High voltage CMOS pixel sensors will be or are proposed to be used in several particle physics experiments for particle tracking like Mu3e experiment. ATLASPIX3 is the first full reticle size monolithic HVCMOS sensor for construction of multi-chip modules. [...] 2021 - Published in: *Nucl. Instrum. Methods. Phys. Res., A* 986 (2021) 164812 In: 12th International "Hiroshima" Symposium on the Development and Application of Semiconductor Tracking Detectors (HSTD), Hiroshima, Japan, 14 - 18 Dec 2019, pp.164812

Detailed record - Similar records

2020-11-11
0642 **Analytic RF design of a linear accelerator with a SLED-I type RF pulse compressor / Liu, Jia-Yang (Tsinghua U., Beijing, Dept. Eng. Phys.; Tsinghua U., Beijing); Shi, Jia-Ru (Tsinghua U., Beijing, Dept. Eng. Phys.; Tsinghua U., Beijing); Zha, Hao; Grudiev, Alexej (CERN); Wang, Ping (Tsinghua U., Beijing, Dept. Eng. Phys.; Tsinghua U., Beijing); Du, Ying-Chao (Tsinghua U., Beijing, Dept. Eng. Phys.; Tsinghua U., Beijing); Chen, Huali-Bi (Tsinghua U., Beijing, Dept. Eng. Phys.; Tsinghua U., Beijing)** This study presents the RF design of a linear accelerator (linac) operated in single-bunch mode. The accelerator is powered by a compressed RF pulse produced from a SLED-I type RF pulse compressor. [...] 2020 - 11 p. - Published in: *Nucl. Sci. Tech.* 31 (2020) 107

Detailed record - Similar records

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Home > Presentations & Talks > Academic Training Lectures

Academic Training Lectures

Search 883 records for:

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Browse by year:

2020 2019 2018 2017 2016 2015 2014 2013 2012 2011
2010 2009 2008 2007/8 2006/7 2005/6 2004/5 2003/4 2002/3 2001/2
2000/1 1999/0 1998/9 1997/8 1996/7 1995/6 1994/5 1993/4 1992/3 1991/2
1990/1 1989/0 1988/9 1987/8 1986/7 1985/6 1984/5 1983/4 1982/3 1981/2
1980/1 1979/0 1978/9 1977/8 1976/7 1975/6 1974/5 1973/4 1972/3 1971/2
1970/1 1969/0 1968/9

Latest additions:

2019-12-10
1527 **Wrap-up Session - Signals in Particle Detectors / Riegler, Werner (speaker) (CERN)** This lecture series discusses the mechanisms of signal generation in particle detectors as well as the electronics processing of these signals. The first lecture outlines how signals arise in particle detectors and discusses the Ramo-Shockley theorem and all related electrostatic theory [...] 2019 - 04:37 Academic Training Lecture Regular Programme, 2019-2020 External link: [Event details](#) In: Wrap-up Session - Signals in Particle Detectors

Detailed record - Similar records

2019-12-05
1519 **Signals in Particle Detectors / Riegler, Werner (speaker) (CERN)** This lecture series discusses the mechanisms of signal generation in particle detectors as well as the electronics processing of these signals. The first Lecture outlines how signals arise in particle detectors and discusses the Ramo-Shockley theorem and all related electrostatic theory [...] 2019 - 0:58:06 Academic Training Lecture Regular Programme, 2019-2020 External link: [Event details](#) In: Signals in Particle Detectors

Detailed record - Similar records

2019-12-04
1512 **Signals in Particle Detectors / Riegler, Werner (speaker) (CERN)**

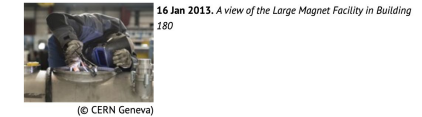
CERN Accelerating science Signed in as: jbenito (CERN) Sign

CERN Document Server

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Home > Multimedia & Outreach > Photos

Photos



Search 18,490 records for:

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search also CERN PhotoLab Archive of unscanned pictures (1952-)

Latest additions:



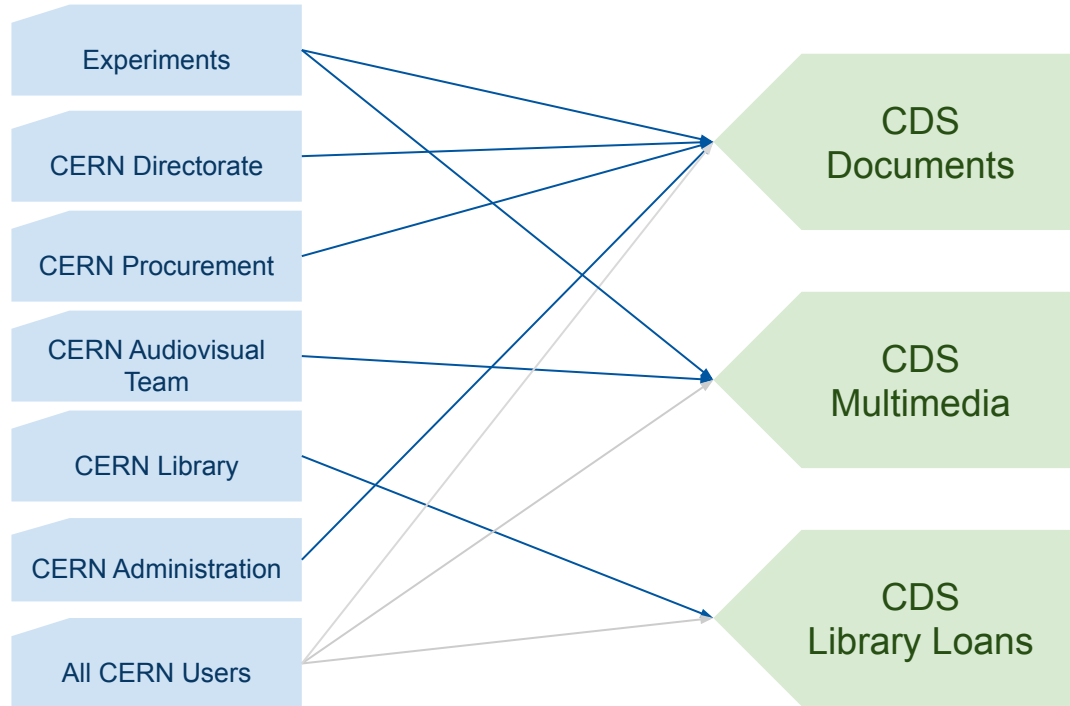
Detailed record - Similar records



Detailed record - Similar records

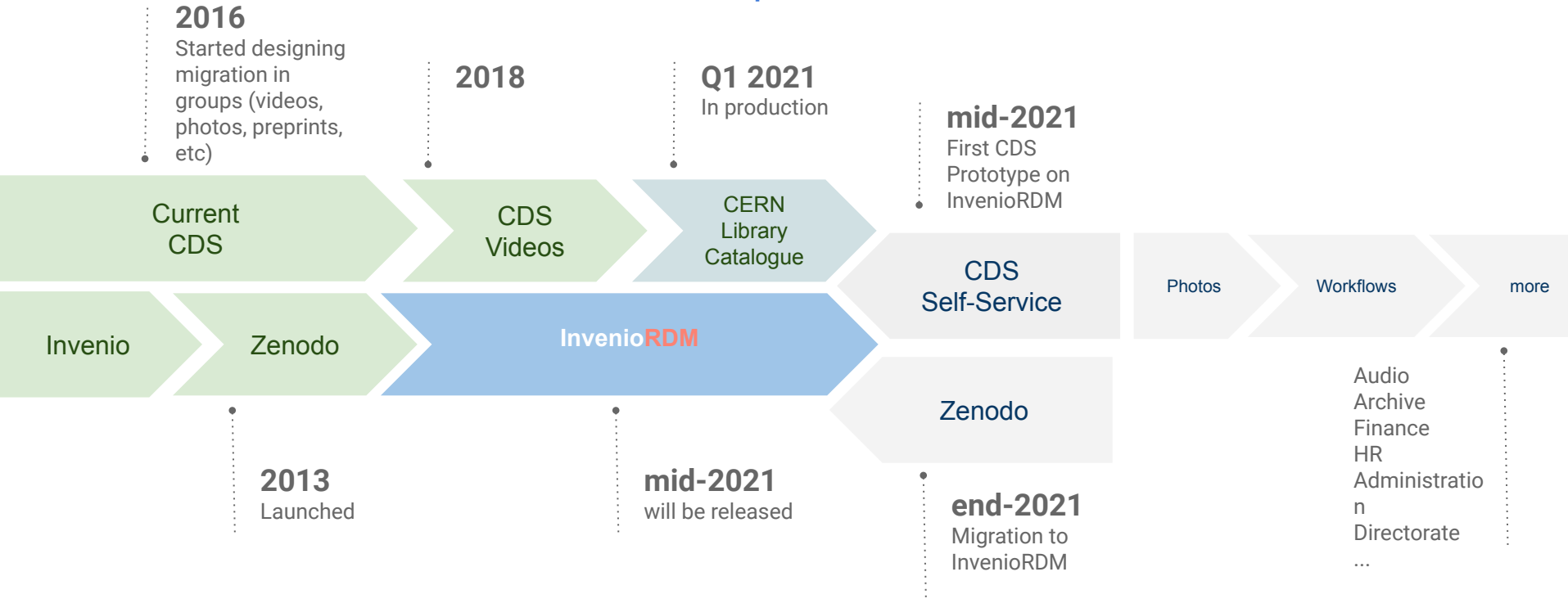
CDS

Multiple users from many domains



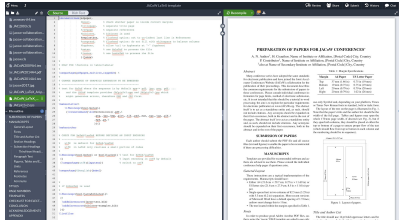
CDS

Development Plan



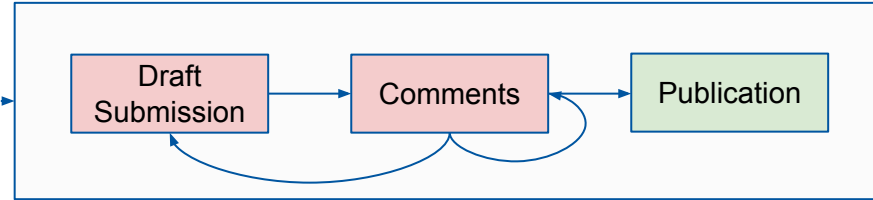
Curation and Workflows

Overleaf

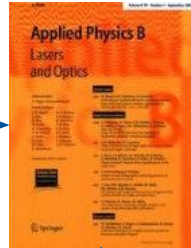


manually

CDS



Journal



Dataset

zenodo

December 9, 2019

The DNNLikelihood: enhancing likelihood distribution with Deep Learning

54 views 532 downloads

OpenAIRE

Name	Size	Download
B1_model.h5	611.0 MB	Download
B1_model.onnx	102.0 MB	Download
B2_model.h5	611.0 MB	Download
B2_model.onnx	102.0 MB	Download
B3_model.h5	611.0 MB	Download
B3_model.onnx	102.0 MB	Download
DNNLikelihood_B1_pickle	784.0 MB	Download
DNNLikelihood_B2_pickle	784.0 MB	Download

Publication date: December 9, 2019

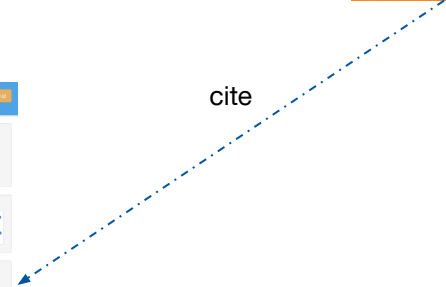
Keywords: **OpenAIRE** (tag) Physics experiment

Related identifiers: Supplement 10.1101/2019.12.09.316970

License (for file): Creative Commons Attribution 4.0 International

Version 1 10.5281/zenodo.3847602 Dec 9, 2019

cite



~5800 users
~1100 daily

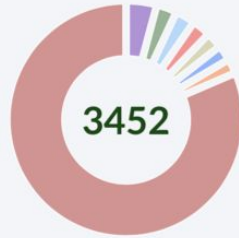
Overleaf

Collaboration

External collaboration

Number of users at other institutions that have collaborated with European Organization for Nuclear Research (CERN) the most, in Overleaf, last month

- Istituto Nazionale di Fisica Nucleare (INFN)
- CNRS
- Fermi National Accelerator Lab
- Stanford University
- Massachusetts Institute of Technology
- Deutsches Elektronen-Synchrotron (DESY)
- Imperial College London
- 733 other institutions

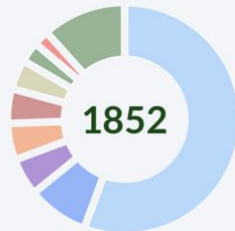


Distribution

Departments

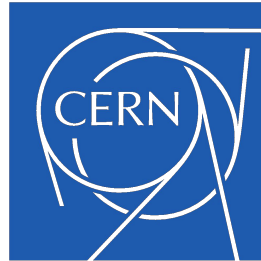
Number of users in different European Organization for Nuclear Research (CERN) departments

- Experimental Physics (EP)
- Beams (BE)
- Technology (TE)
- Information Technology (IT)
- Engineering (EN)
- Theoretical Physics (TH)
- Experimental Physics
- Beams
- Other



The screenshot shows the Overleaf website interface. At the top, there's a navigation bar with 'Overleaf' logo, 'Features & Benefits', 'Templates', 'Help', 'Projects', and 'Account'. Below the navigation bar is a large image of the CERN dome. A search bar with the CERN logo is positioned in the center. Below the image, the text reads 'European Organization for Nuclear Research (CERN) on overleaf'. There are links for 'Overview', 'Quick Start', 'Templates', and 'FAQ & Help'. The main content area is titled 'Featured LaTeX Templates' and displays six template cards. Each card shows a preview of a document and a brief description. The templates include: 'CERN ATLAS Note Template', 'HL-LHC report', 'CERN Presentation title', 'JAGWW LaTeX template', 'CERNATS Note', and 'CERN Report'. At the bottom of the page, there is a footer with copyright information and links for 'Privacy and Terms', 'Security', 'Contact Us', 'About', and 'Blog'.





jose.benito.gonzalez@cern.ch