

# Invenio @ CERN IT

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# CERN IT

**DR** Section

Digital Repositories

# Invenio

# DR Section

CERN DOCUMENT SERVER  
(CDS)

CERN OPEN DATA

CERN ANALYSIS PRESERVATION

ZENODO

B2SHARE

DAIS ARCHIVAL STORE

REANA

INVENIO

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# CDS

- Production (Invenio 1.2):
  - authority records for authors + disambiguation
  - recommender system
- Development: Invenio 3

# CDS labs

- Basic CDS - Invenio 3
- Migrating content
- Testing, feasibility

The screenshot shows the CDS search interface for the query 'atlas'. The top navigation bar includes 'CDS', a search bar with 'atlas' entered, and links for 'Search', 'About', and 'Log In'. The main search results page displays 'Found 10422 results.' and a pagination control showing page 1 of 10. A 'Sort by: Best match' dropdown is visible. On the left, there are three filter panels: 'year' with a histogram showing a peak around 2016; 'Authors' with a list of names and counts (e.g., Aad, Georges (530)); and 'Languages' with a list of languages and counts (e.g., eng (10235)). The main content area lists search results, including 'Foundations of Atlas' (Computing and Computers), 'Single top-quark production cross-section at the LHC in ATLAS' (Particle Physics - Experiment), 'Physics potential of ATLAS detector with high luminosity' (Detectors and Experimental Techniques), 'The ATLAS Muon Spectrometer' (Detectors and Experimental Techniques), and 'The ATLAS inner detector and flavour tagging performance' (Detectors and Experimental Techniques). Each result includes a title, a brief description, and a date.

# CDS videos

- Archiving Videos
- Video experience
- Video CERN production

CDS VIDEO

RECHERCHE

LOGIN DIRECTORY ENGLISH

Accélérateur de science

**RECENT**  
MOST RECENTLY ADDED VIDEOS

THE GLOBE OF SCIENCE

LHC OPERATIONS  
A DAY IN THE CONTROLE CENTER

ACCELERATING SCIENCE

**CHANNELS**  
MOST RECENTLY UPDATED CHANNELS

SEARCH ...

CERN VIDEO PRODUCTION

PRESS OFFICE SELECTION

EXPERIMENTS

ALICE DETECTOR

LOREM IPSUM

ACCELERATORS

LOREM DOLOR IPSUM

SOME VIDEOS

AT LHC IP2

CDS

TERMS OF USE NEED HELP? FEED BACK ABOUT FAQ CONTACT US

CERN

POWERED BY INVENIO



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# CERN Open Data

- Publicly-accessible site for curated releases of CERN **data sets** and **software**
- Contains data from all **LHC experiments**
- Based on Invenio 2.0
- <http://opendata.cern.ch>
- <https://github.com/cernopendata>

*Developed by CERN SIS and CERN IT in collaboration*

## Education

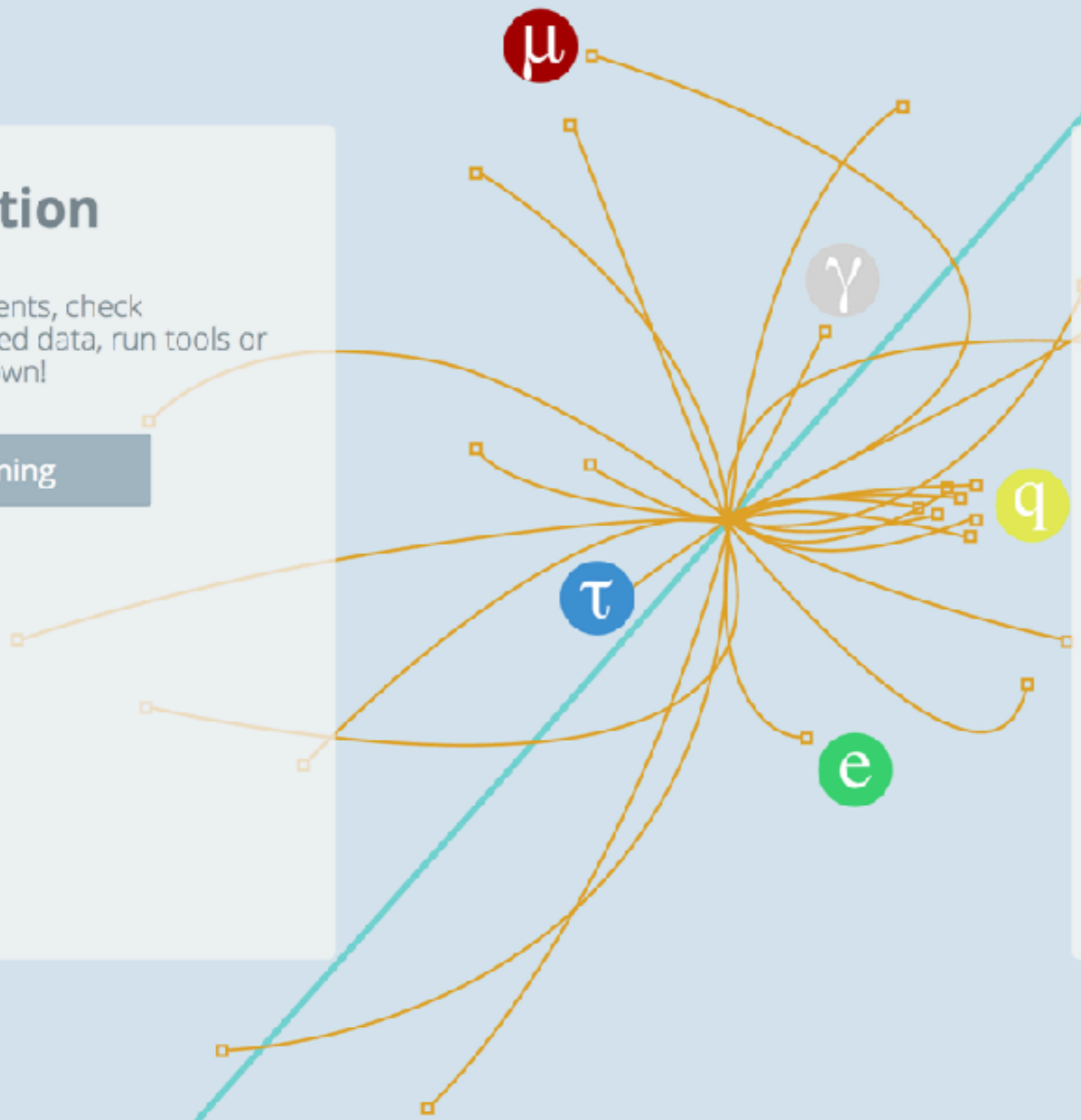
Visualise events, check reconstructed data, run tools or build your own!

Start learning

## Research

Get the genuine working environments, virtual machines and datasets to start your research

Start analysing



# CERN Open Data

- 2016 highlights:
  - CMS Run2011 Release (300 TB)
  - ATLAS open data release (2016)

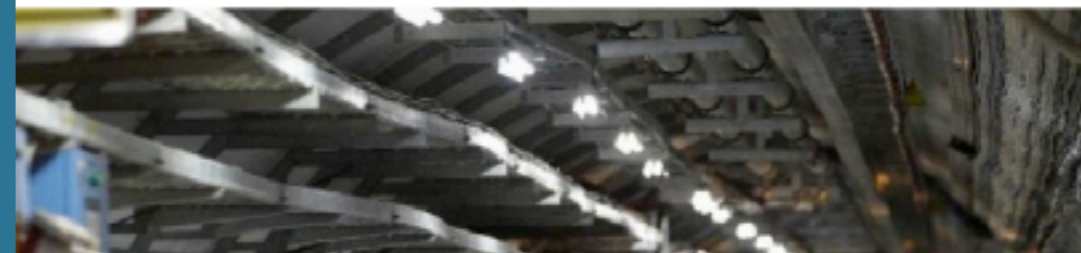
## Impact

The Washington Post

Speaking of Science

**Open sourcing the secrets of the universe: huge amount of Large Hadron Collider data is now online**

By Sarah Kaplan April 26 



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# CERN Analysis Preservation

- A platform for **preserving knowledge** and **assets** of an individual physics analysis.
- Capturing the elements needed to **understand** and **rerun** an analysis even several years later:
  - ✓ data
  - ✓ workflow
  - ✓ software
  - ✓ context
  - ✓ environment
  - ✓ documentation
- <http://analysispreservation.cern.ch>
- <https://github.com/cernanalysispreservation>

*Developed by CERN SIS and CERN IT in collaboration*

# CERN Analysis Preservation



**CERN**  
Analysis Preservation

Welcome to the **CERN**  
Analysis Preservation  
Portal.

Our mission is to preserve the  
analyses  
across all CERN experiments for  
years  
to come...

➔ Log in with your CERN account





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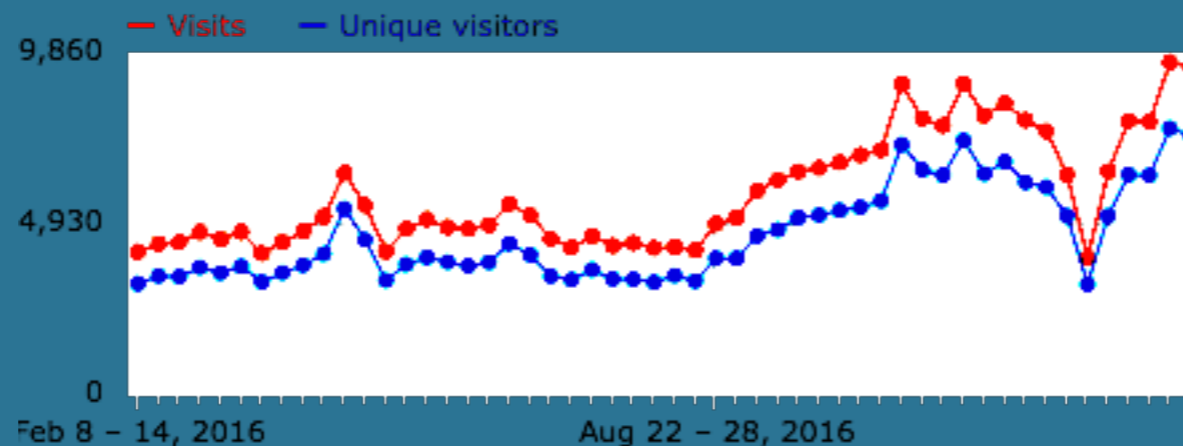
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# Zenodo

- Zenodo on Invenio 3 (September)
- Search is 10 times faster
- Handling fast uploads up to 100GB of data
- 2 times more visitors and 3 times more records



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# B2Share



- **EUDAT**: European e-infrastructure of integrated data services and resources to support research.
- B2Share can be deployed by any organisation
- Enables researcher to **publish research data**
- Enables communities to define custom metadata format
- B2Share v2 released as an Invenio 3 overlay (last February)
- <http://b2share.eudat.eu>.




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[RECORDS](#) > 8B49A31F0FAA4F479F8263DB8382D531

# English-Greek Lexicon of Electronics

 by [Kaliontzopoulos Panos](#);

Feb 13, 2017

Last updated at Feb 23, 2017

**TechnicalInfo:** Second edition with more than 31.000 terms

**Disciplines:** 5.5.25 → Engineering → Electronic engineering;

**Keywords:** [Lexicon](#), [English-Greek](#), [Dictionary](#) ;

**DOI:** [10.23728/b2share/8b49a31f0faa4f479f8263db8382d531](https://doi.org/10.23728/b2share/8b49a31f0faa4f479f8263db8382d531) 
**PID:** [11304/7117c31b-9a35-437a-949a-4765c43f149d](https://nbn-resolving.org/urn:nbn:de:hbz:5:1-63862-p0011-9) 


## Files

Name	Size
<a href="#">Lexicon_V2.xlsx</a>	1.69MB

## Basic metadata

<b>Open Access</b>	True ✓
<b>License</b>	Creative Commons Attribution-NonCommercial-ShareAlike (CC-BY-NC-SA) <b>URL</b> <a href="http://creativecommons.org/licenses/by-nc-sa/4.0/">http://creativecommons.org/licenses/by-nc-sa/4.0/</a>
<b>Contact Email</b>	pkalio@iccs.gr
<b>Publication Date</b>	1916-10-20

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# Incubator

- **OAIS Archival Store**
  - Preserving for the long term
  - Following OAIS reference model
  - Base on Archivematica + Invenio module (integration)
- **REANA**
  - Started as part of CERN Analysis Preservation
  - Re-run research data analyses
  - <https://github.com/reanahub>

Questions?

INVENIQ)

# Next

- **CDS**
  - Books (Circulation, Acquisition, ILL), Photos, “CRIS”, Self-Service
- **Open Data**
  - New data model, new UI, Invenio 3
- **Analysis Preservation**
  - Wider user testing, progressive deployment
- **Zenodo:**
  - Consolidation, DOI versioning, DSoA, Software integration
- **B2Share:**
  - UX, connecting with other EUDAT services (B2Safe, B2Drop, ...)