Open Data and Data Analysis Preservation Services for LHC Experiments

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CHEP2015, Okinawa, Japan

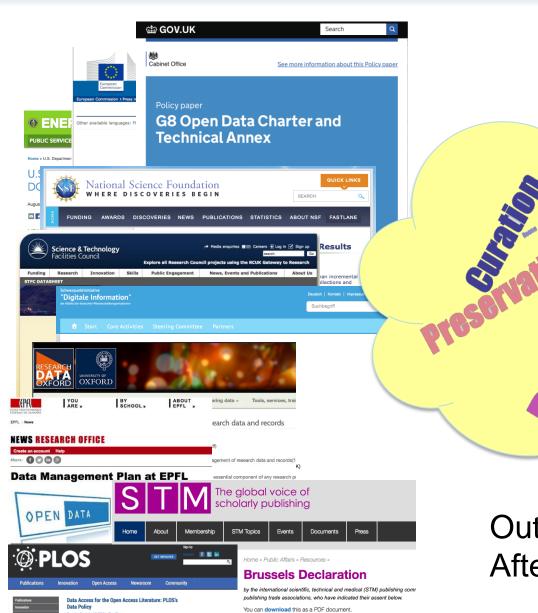






The Context: RDM





Outside the Project
After the Project (3...10 years)

Portal focused on Open



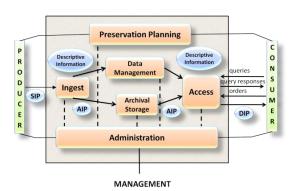








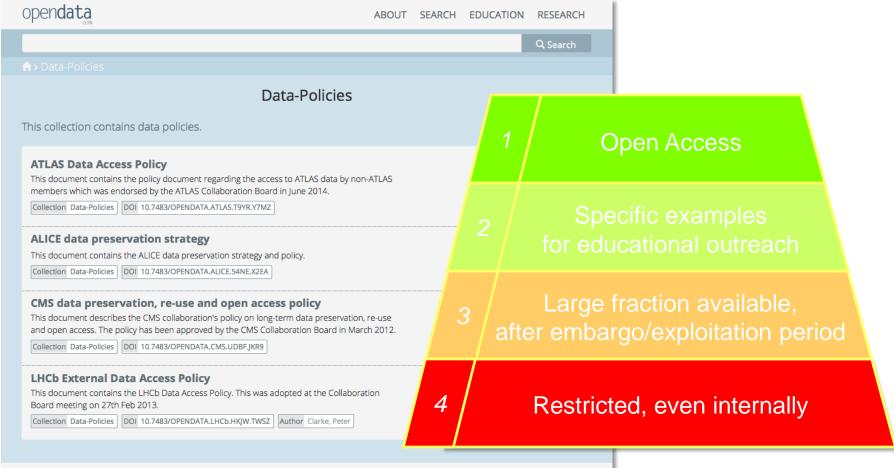






Open Data Policies









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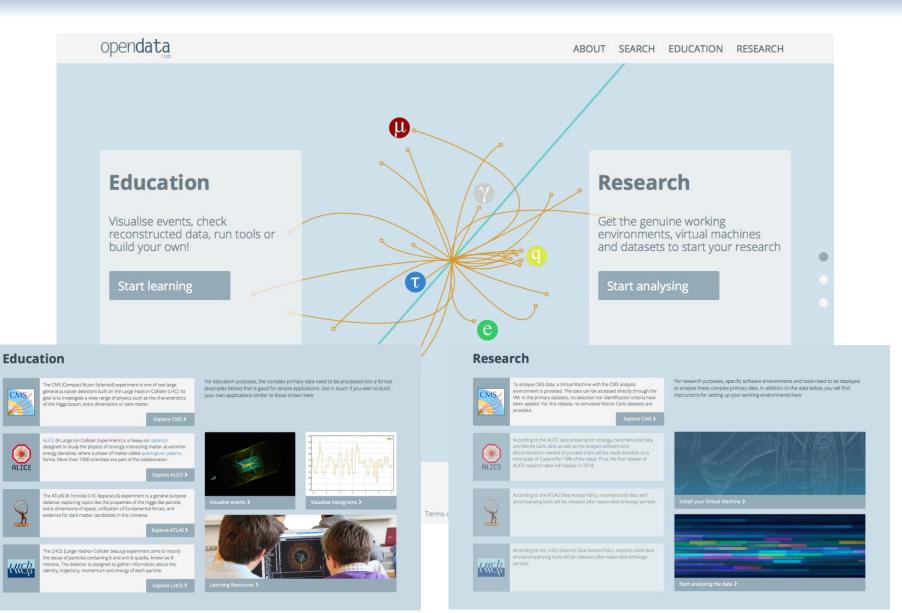






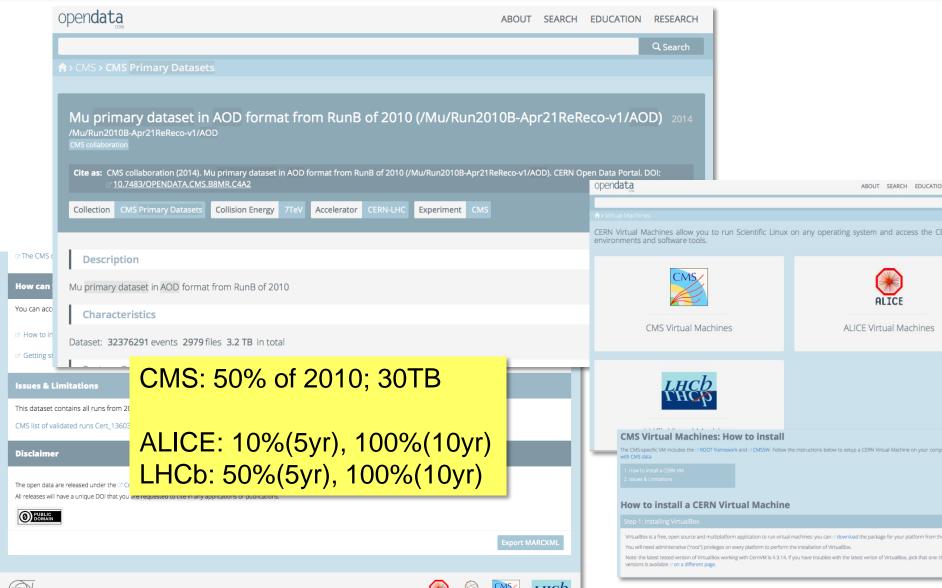
Open Data Portal





L3: Reconstructed Data



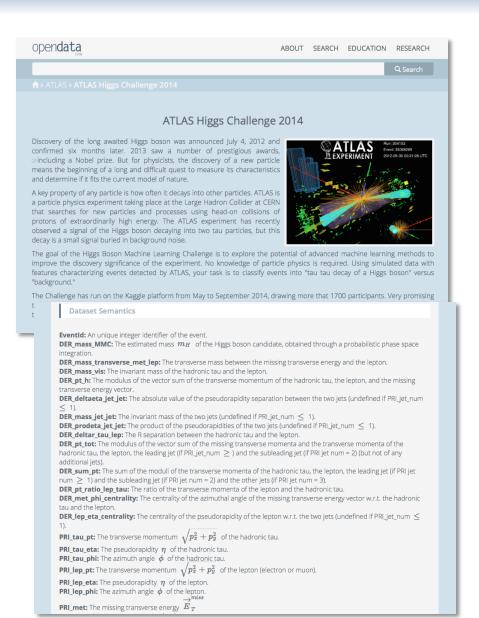


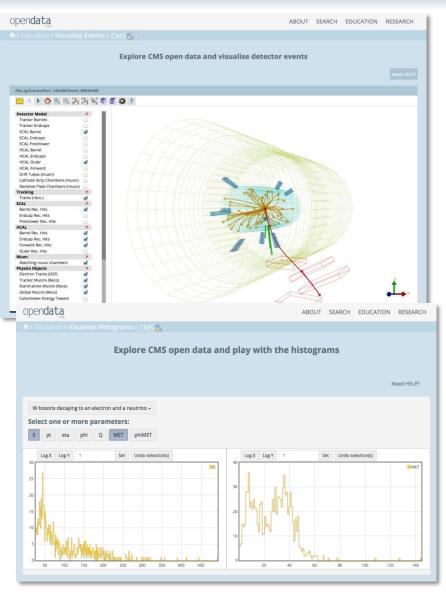
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ALICE: Poster #248, session B

L2: Outreach and Education



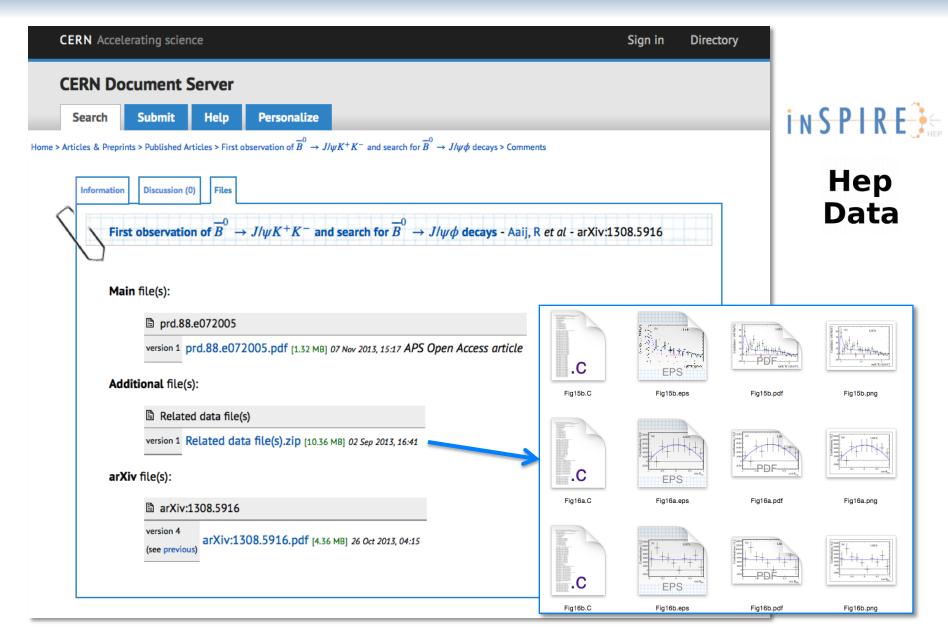




CMS: Poster #118, session B

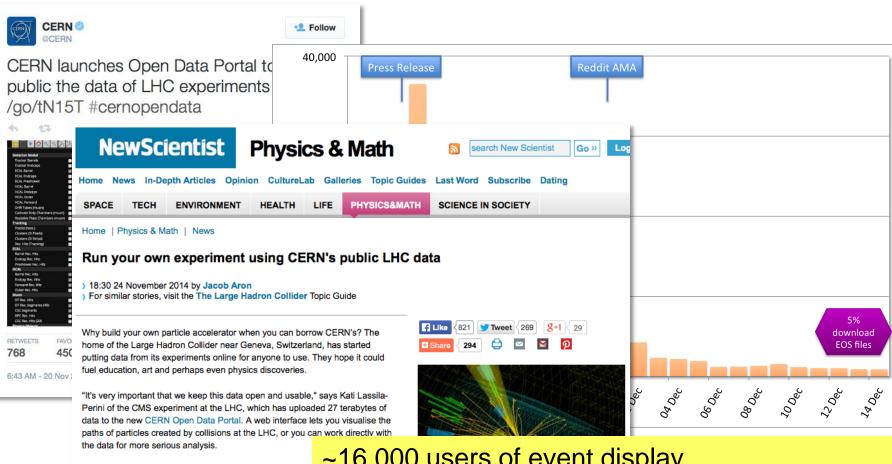
L1: Publication Data





Interest





Other LHC experiments have uploaded smaller data sets for purposes, allowing budding particle physicists to try their ha massive-scale physics. The data could also be turned into done previously at a CERN arts festival.

It's possible that physicists might search through the data a discoveries, but most people with the necessary skills alrea experiments, says Lassila-Perini. "There are not so many s around."

~16,000 users of event display

~3,000 users of histogramming New education/theory connections

Re-use for statistical analyses, machine learning

L3: Analysis Workflow

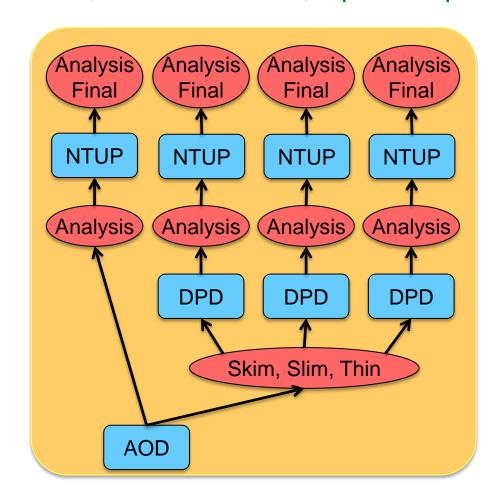


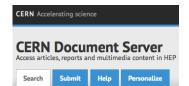
- Data Policies:
 - Level 3: Reconstructed data and simulations, together with the software, analysis workflows and documentation needed to access the data, understand them, reproduce published analyses















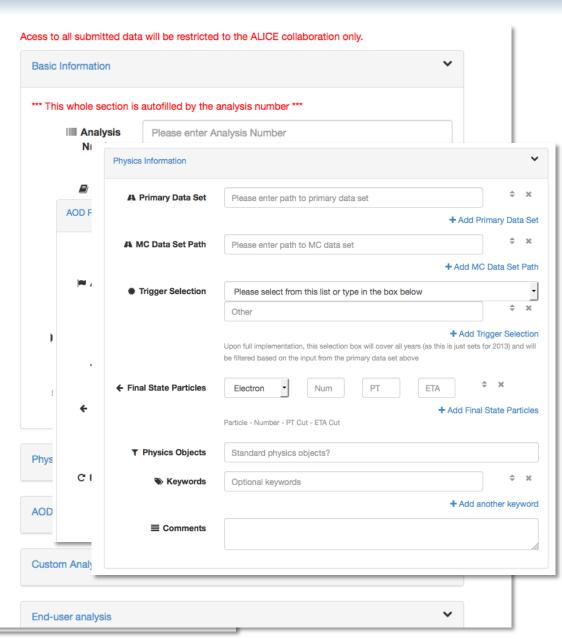


Analysis Capture



- Workflow, code, sta
- Data, Environment

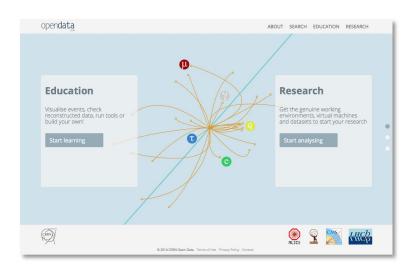


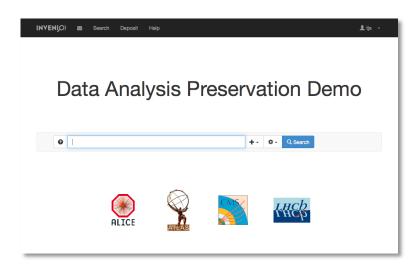


Conclusion



Capture, Share, Preserve





In close collaboration with:

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Silvia Amerio, Ben Couturier, Ana Trisovic
Mihaela Gheata, Costin Grigoras
Kyle Cranmer, Lukas Heinrich, Felix Socher, David Rousseau
Mike Hildreth, Jakob Blomer, Luca Mascetti
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