



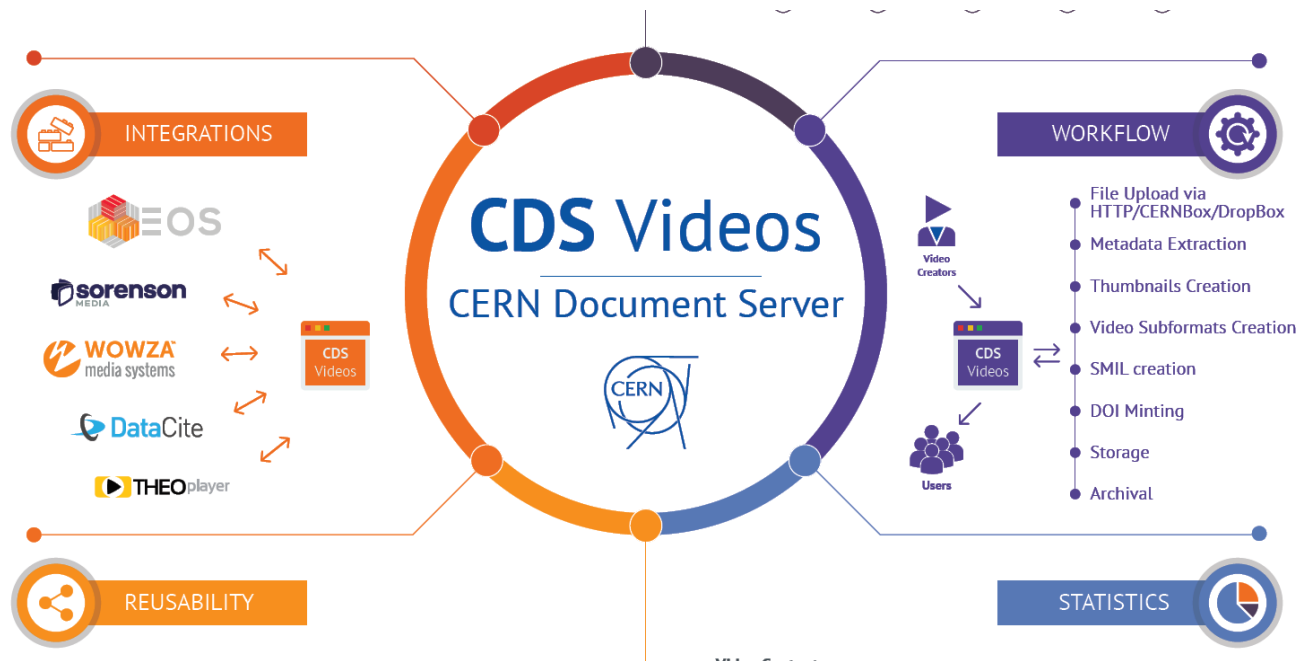
# The CHEP 2018 Poster Awards

CHEP 2018, Sofia, Bulgaria

Latchezar Betev

# #308 - CDS Videos - The new platform for CERN videos

Flavio Costa, Esteban Gabancho,  
Jose Benito Gonzalez Lopez, Ludmila Marian,  
Nicola Tarocco, Sebastian Witowski (all CERN)



# #510 - Patatrack

Adriano Di Florio (Universita e INFN, Bari)

Felice Pantaleo (CERN)

## Patatrack

F. Pantaleo (CERN) – felice@cern.ch  
on behalf of the CMS Patatrack Team



### CMS Trigger

- Two levels: Level-1 and High-Level Triggers
- Reduce input rate (40 MHz) to a data rate  $O(\text{kHz})$  that can be stored, reconstructed and analysed offline maximizing the physics reach of the experiment

#### Today:

- Level-1 Trigger output rate limited to 100 kHz by the readout electronics
- High Level Trigger: based on the CMS software, running on 30,000 CPU cores

**Starting from Run4 (2026):**

### Moore's curse

- Between 2018 and 2026, Gordon Moore will owe us a factor 16
- We will optimistically get a factor 4 performance

### Reality leaves a lot to the imagination

- Patatrack team was born in 2016
- Driving CMS towards awareness of evolving technology in preparation for future upgrades

# #603 - Collaborative Scientific Authoring at CERN: A user-centered approach

Nikos Kasioumis (CERN)

Valeria Brancolini (CERN)



## Collaborative Scientific Authoring at CERN: A user-centered approach

Nikos Kasioumis & Valeria Brancolini



For over a year we ran a CERN-wide trial of collaborative authoring platforms, understanding the authoring habits of the CERN community and gathering user requirements. As a result, the Overleaf cloud platform is now fully available to the CERN Community.

We first explain our user-centered approach, how it led us to a decision and why it was important to follow this approach. We then highlight the usage growth of Overleaf at CERN since its adoption and we finally look into the future of CERN Authoring.

Jan  
1955

The first ever CERN Report is published.



CERN Reports, often called Yellow Reports, are published to this day.

Sep  
2011

The new E-Publishing service is established.