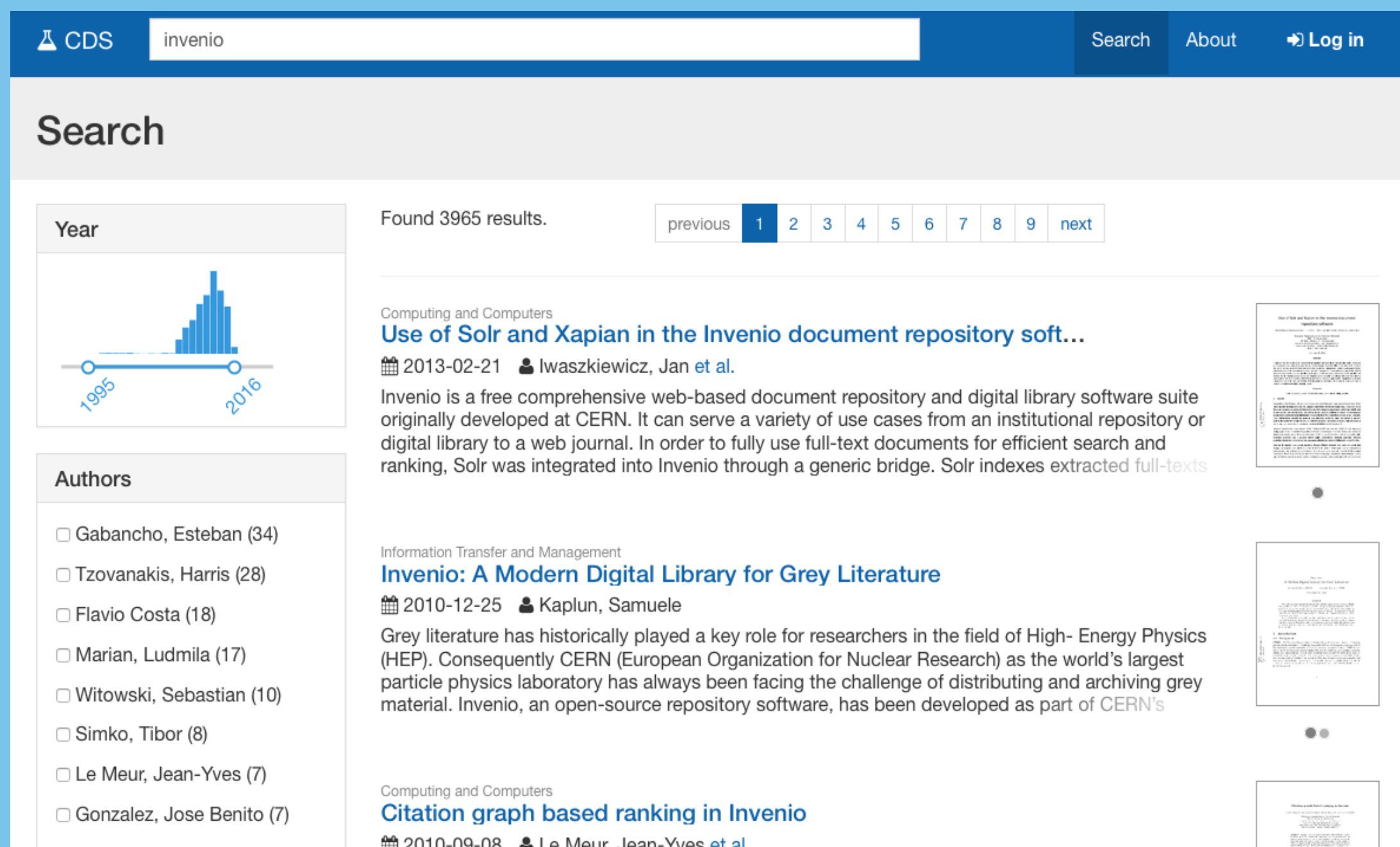


# CERN Document Server

## Towards the Next Generation CERN Institutional Repository

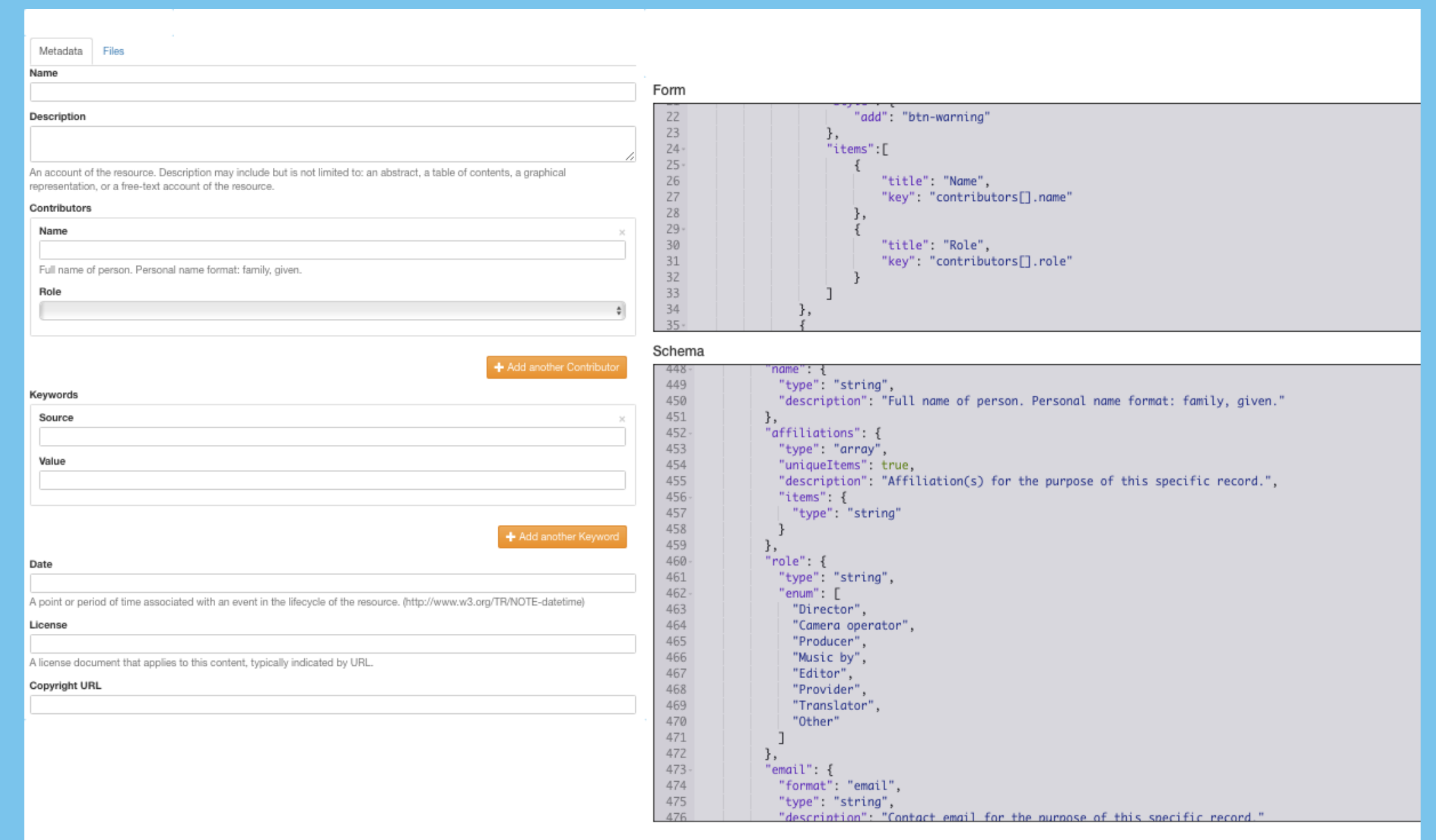
### Retrieval

The new version of CDS significantly improves the information retrieval system. By switching to Elasticsearch as the underlying search engine and redesigning our complex data model, the new CDS provides up to 3 times faster search results and up to 50 times faster indexing. Another determining change is a completely new design that offers a clearer, more intuitive way of searching, and real time filtering and previewing of data.



### Submission

The CDS submission system has undergone a complete redesign based on our extensive experience working with different communities at CERN. The new version, based on a flexible data model, offers the possibility to create tailored content for different user communities. Together with customizable submission and publication workflows comes a new, richer user interface and significant speed improvements that enhance user experience.



### Community driven

The new CDS aims to be the CERN's document hub, acting as an aggregator over specialized repositories, each having its own software stack, with features enabled based on the repository's content.

The aim is to enable each content producer community to have its own identity, both visually and functionally, as well as increased control on the data model and the submission, curation, management, and dissemination of the data.



#### Research

All research documents produced at CERN are stored on this repository. Metadata is validated according to strict standards in order to facilitate reporting and service interoperability.

#### Books

Repository for books, standards, proceedings, and reports, curated by the CERN Library. With circulation features enabled, this vast online catalog is available to all CERN users.

CDS

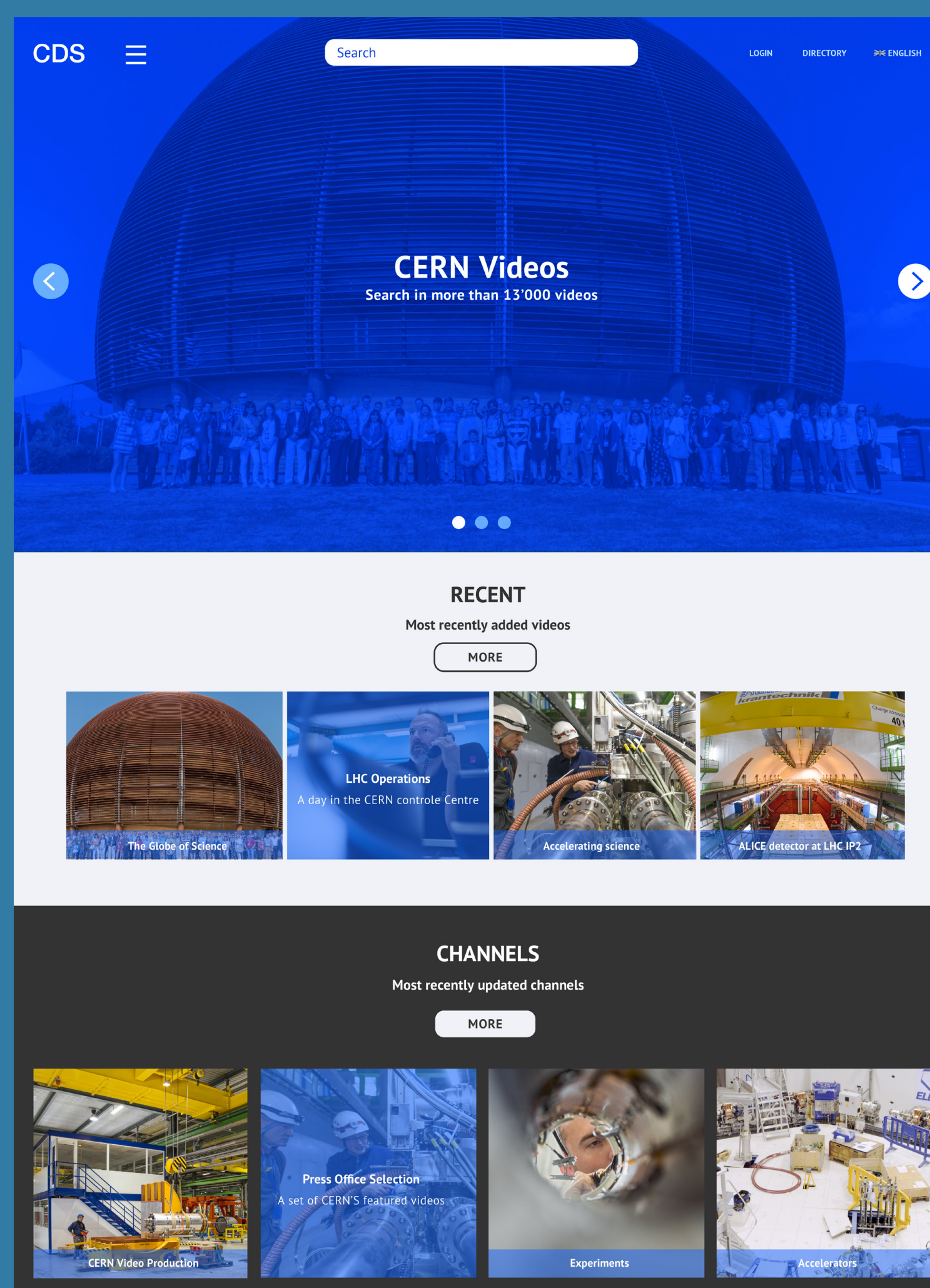
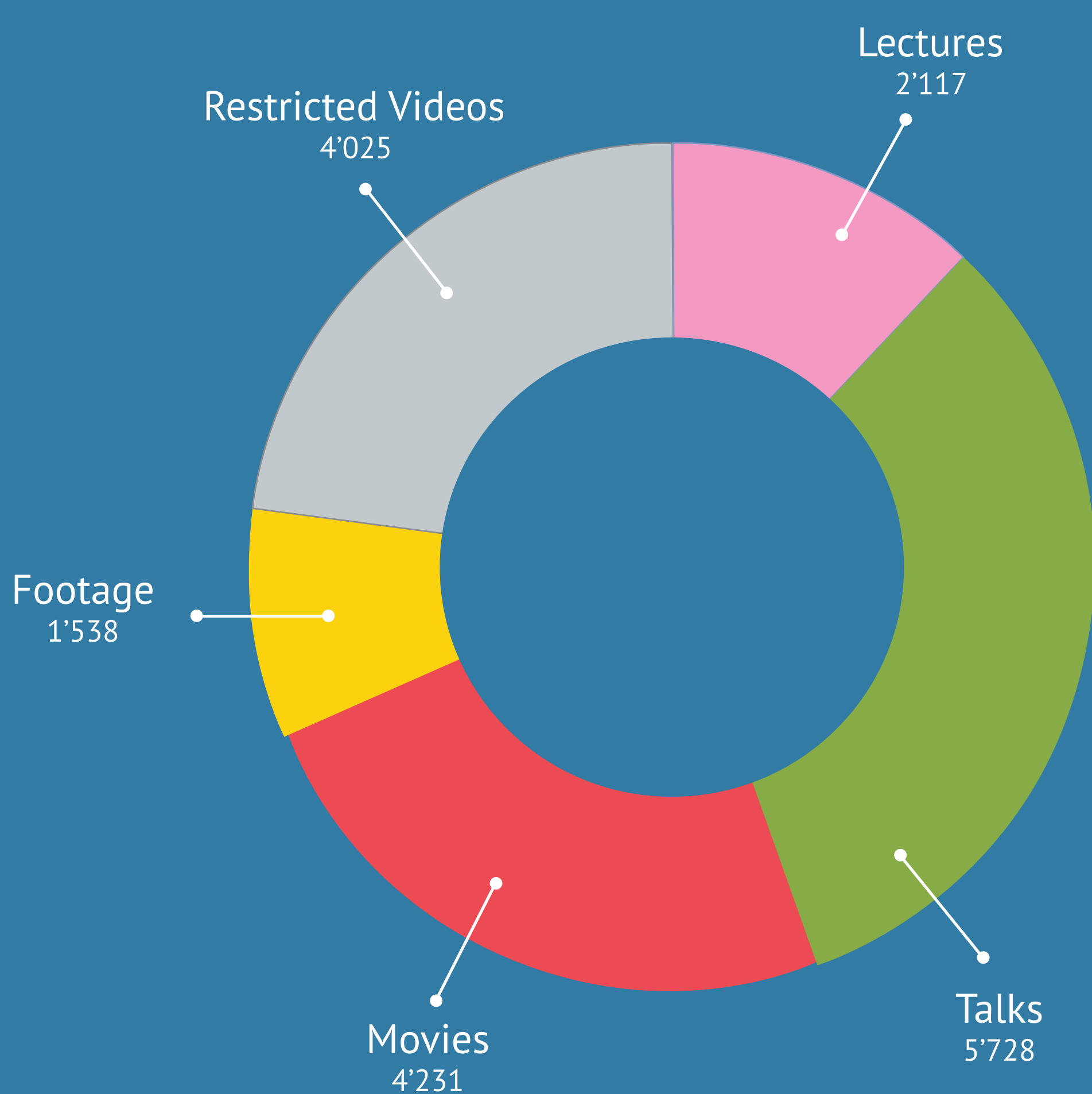
#### Photos

Repository for images produced by CERN and all the Experiments. It comes with photo-related features like content-based image retrieval and image tagging.

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Repositories for all submission and publication workflows tailored for the Experiments and CERN Departments, with the emphasis on user empowerment, covering a variety of document types.

### Videos



#### Submission

- Video upload
- Metadata form
- Data validation

#### Processing

- Metadata extraction (FFmpeg)
- Subformats creation (Soreson)
- Thumbnails extraction (FFmpeg)

#### Record creation

- DOI minting
- Files storage (EOS)
- Metadata storage (PostgreSQL)

#### Presentation

- Video playback
- Download
- Embed & Export

