





*Indico-JACoW Collaboration*

Duarte Galvão, Michel Succar - IT-CA-CTE (CERN)

**ATS Seminar (13th February 2025)**



The screenshot shows the Indico web interface. At the top, there's a navigation bar with links for 'Home', 'Create event', 'Room booking', and 'My profile'. Below this is a search bar with placeholder text 'Enter your search term' and a 'Create event' button. The main content area is titled 'Main categories' and displays a list of categories with their event counts:

Category	Events
CERN-Related Clubs, Associations and Forums	9,256 events
Committees	12,044 events
Conferences, Workshops and Events	10,460 events
Departments	116,959 events
Directorate	507 events
Experiments	856,409 events
Global Indico	10,523 events
Outreach	2,395 events
Projects	74,220 events
Schools, Seminars and Courses	12,030 events
TEST Category	69 events

To the right, there's a 'News' section with three items:

- Indico 3.3 (Posted 5 Dec 2023)
- Adding Images to minutes (Posted 29 Aug 2023)
- Indico 3.2 (Posted 19 Jun 2023)

Below the news is an 'Upcoming events' section listing several workshops and conferences.

At the bottom left is the CERN logo, and at the bottom right are links for 'Help', 'Contact', 'Terms and conditions', 'URL Shortener', and 'Privacy'.

- **Event Management System**
- **Collaborative effort - MIT License**
- **Core Developed at CERN**
- **With contributions from the United Nations, Max-Planck Institute for Physics and many others!**
- **70+ developers over the years**

*The most popular event management system you never heard about*

- 300+ servers
- > 350K users
- Initial growth in research, but growing beyond it
  - [indico.un.org](http://indico.un.org)
  - [events.canonical.org](http://events.canonical.org)
  - [indico.gnome.org](http://indico.gnome.org)
  - [lpc.events](http://lpc.events)

# CERN Document Server Software

CDS Agenda »

[\[features\]](#)  
[\[demo\]](#)  
[\[download\]](#)  
[\[mailing lists\]](#)

## About CDS Agenda

**T**HE Meeting Manager tool (**CDS Agenda**) allows you to create, modify and store agendas of meetings, conferences or workshops together with all the documents (transparencies, minutes, pictures...) associated with them.

The CDS Software suite is free software, licensed under [GNU General Public Licence \(GPL\)](#). It is provided in the hope that it will be useful, but without any warranty. Please read also our [support](#) pages.

The CDS Agenda Software was initially developed in 1999 by the CDS team on a request by the [ATLAS](#) experiment. The initial software was greatly improved in the following years thanks to the comments and feedback from its users.

## Latest Version

[CDS Agenda v4.2.9](#) (October, 18th 2004)

---

Maintained by [cds.support@cern.ch](mailto:cds.support@cern.ch) group.  
Copyright © 2002 CERN. Licensed under [GPL](#).

URL: <http://cdsware.cern.ch/cdsagenda/index.shtml>  
Revised 18 Oct 2004 12:23:13 CEST

[CDS Agenda System v4.2] [Tools] [User]

[Help]



This CDS Agenda tool is available under the GPL license. Among its numerous features it allows to manage time-tables of meetings, to attach multimedia files to each meeting item and to store the resulting agendas in a multi-levels hierarchical tree.

## Browse:

- [Committees](#) ↗
- [Conferences, Workshops and Events](#) ↗
- [Divisional Meetings](#) ↗
- [Experimental Meetings](#) ↗
- [Projects](#) ↗
- [Seminars](#) ↗
- [TEST base](#)  
(you can try the agenda maker tool in this base) ↗

Maintained by: The CDS Support Team ([Bugs and reports](#))

If you want to use this conference management tool  
for your own meetings/conferences, please [contact us](#).

[\[CDS Agenda System v4.2\]](#) [\[Tools\]](#) [\[User\]](#) [\[Add Event\]](#)[\[Help\]](#)[Home](#)>[Conferences, Workshops and Events](#)>[Conferences](#)[up](#) 

Available Agendas in this category:

 export to personal scheduler  not yet finalized  finalized[2000](#) [2001](#) [2002](#) [2003](#) [2004](#)**2004****November 2004** **04 - 10** [HARD PROBES 2004](#) (protected)**October 2004** **22 - 23** [Forward Physics at RHIC and LHC](#)  
 **15** [GAC](#)  
 **05 - 09** [LHC Days in Split](#)**September 2004** **13 - 17** [10th Workshop on Electronics for LHC and future Experiments, Boston USA](#)**July 2004** **12 - 17** [Physics at LHC 2004](#)  
 **05 - 09** [EPAC 2004](#)**May 2004** **29/05 - 01/06** [The QCD-phase diagramme: From theory to experiment](#)  
 **27** [CERN: The Future of Information Technology](#)  
 **27** [First Tuesday @ CERN: Industrial Impact of Information Technology from CERN](#)  
 **06 - 07** [Sharing Knowledge across the Mediterranean](#)**April 2004** **05 - 07** [UK Institute of Physics: Particle Physics 2004](#)**2003****October 2003** **06 - 10** [8th ICATPP Conference](#)**September 2003** **16** [Celebrating CERN's discoveries and looking into the future](#)**July 2003** **12 - 19** [Symmetries and Spin](#) (protected)  
 **07 - 12** [Physics at LHC](#)  
 **07 - 12** [Physics at LHC - Proceedings](#) (protected)**June 2003**

MaKaC module (InDiCo project)

Actions

[Register new user](#)

[Login](#)

This category:

[Home](#)

Welcome to InDiCo!! This tool is one of the modules of the [InDiCo](#) project intended to help you to manage your conferences through the web. This module has been completely developed by CERN (IT-UDS-CDS). Please, note that this is a **DEVELOPMENT** version of the tool. There's not yet a production version but if you are interested in this tool, you'll find some information and how to contact us in our [home page](#).

Conferences:

- 13-Sep-2004 - [10th Workshop on Electronics for LHC and future Experiments](#) (protected)
- 27-Sep-2004 - [CHEP 2004](#)
- 23-Apr-2004 - [INDICO Workshop](#)
- 10-Oct-2005 - [ICALEPCS'2005](#) (protected)
- 17-Jan-2005 - [Workshop Chamonix-2005 \(XIV\)](#)

Powered by [InDiCo](#)

CHEP 2004

<https://web.archive.org/web/20040612001349/http://indico.cern.ch/conferen> [login]

 **CHEP 2004**  
INTERLAKEN

**CHEP 2004 HOME**

**SCIENTIFIC PROGRAMME**

**CALL FOR ABSTRACTS**

[Submit a new abstract](#)

[View my abstracts](#)

**TIME TABLE**

**CHEP 2004**  
from 27 September 2004 to 01 October 2004  
*Interlaken, Switzerland*

These are the Web pages providing information for the upcoming Computing in High Energy Physics (CHEP) conference in September 2004. CHEP conferences provide an international forum to exchange information on computing experience and needs for the High Energy Physics community, and to review recent, ongoing and future activities. CHEP conferences are held every 18 months, the previous one being held in San Diego in March 2003.

Dates: from 27 September 2004 08:00 to 01 October 2004 18:00

Location: *Interlaken, Switzerland*

Powered by [InDiCo](#)



----- Original Message -----

Subject: Saturday, 4 March 2023, 13:51  
From: To: [indico-team@cern.ch](mailto:indico-team@cern.ch)

Name correction

Wrong name:-MR  
ORIGINAL NAME IS:-MRS  
PNR NUMBER IS:-  
PLEASE CHANGE THIS NAME



e dans Indigo l annulation

to get access to the CMS INDIGO

cannot access the indigo pages.

l'ai pas trouvé sur le site indigo.

global indigo category.

open indigo meeting links.

Indigo says that

Creating indigo category '

ALICE meetings on indigo page.

: Create a new project in indigo

for an indigo event,

cern indigo account

: indigo ATLAS pages,

: Problems with indigo page

did not find it on Indigo,

and we now have our own Indigo installation :

I am going to start work at Indigo project in March

# History



- 1999 - CDS Agenda
- 2002 - EU Project
- 2004 - Indico in Production
- 2007 - Room Booking
- 2008 - Interface overhaul
- 2013 - First Workshop
- 2015 - The UN starts using it
- 2017 - Indico 2.0 (rewrite)
- 2021 - Indico 3.0 (Python 3)
- 2023 - 1 Million Events  
surpassed at CERN 🎉
- 2024 - 20 years!



## Integrated Digital Conferencing

Fact Sheet

### Programme(s)

[FP5-IST - Programme for research, technological development and demonstration on a "User-friendly information society, 1998-2002"](#)

### Topic(s)

[IST-2001-3.4.1 - Semantic Web technologies](#)

### Call for proposal

Data not available

### Funding Scheme

[CSC - Cost-sharing contracts](#)



### Project Information

#### INDICO

Grant agreement ID: IST-2001-34306



Project closed

#### Start date

1 May 2002

#### End date

30 April 2004

#### Funded under

Programme for research, technological development and demonstration on a "User-friendly information society, 1998-2002"

#### Total cost

€ 1 521 461,00

#### EU contribution

€ 1 240 000,00



#### Coordinated by

SCUOLA INTERNAZIONALE SUPERIORE DI STUDI

AVANZATI



<https://cordis.europa.eu/project/id/IST-2001-34306>

# Team



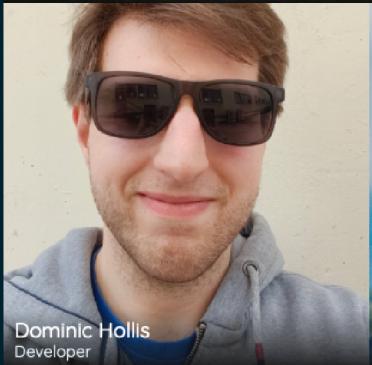
Adrian Mönnich  
Lead Developer, Project Manager



Tomas Roun  
Developer



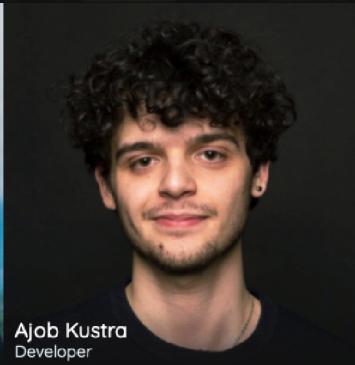
Duarte Galvão  
Developer



Dominic Hollis  
Developer



Michel Succar  
Developer



Alob Kustra  
Developer

# Team



Adrian Mönnich  
Lead Developer, Project Manager



Tomas Roun  
Developer



Duarte Galvão  
 old JACoW guy



Dominic Hollis  
Developer



Michel Succar  
 new JACoW guy



Alob Kustra  
Developer





# 2000s

# SPMS

- "Scientific Programme Management System"
- Developed by FNAL for JACoW in the early 2000s
- Allowed the handling of users, affiliations, mailing lists, editing conference proceedings, etc.
- It's basically an oracle database using SQL to generate HTML



Screenshot of the JACoW Central Repository User Profiles login page:

The page title is "JACoW Central Repository User Profiles". It features a logo for "JACoW" in the top right corner. The URL in the address bar is "oraweb.cern.ch/pls/jacow/profile.html".

Form fields include:

- Username:
- Password:
- Login:
- Note: "This site uses SSL to encrypt your username and password before transmission."
- Forgotten Password: [You must enter your username name to retrieve your password.](#)

Text below the form:

Are you a new user?

Every user requires an account (i.e. username and password) to access the system. JACoW Central Repository requires that you submit your PROFILE DATA when an account is created.. Profile data is basically first and middle names, family name, e-mail address, affiliation and other related information. Your profile may exist if you are a coauthor on an existing contribution.

Search for a Profile, Create a Profile/Account:

Browser Requirements:

- Netscape 6 (or higher) or MS Internet Explorer 4 (or higher)
- Session Cookies
- JavaScript

Contact information:

Please contact the [JACoW Central Repository Database Administrator](#) with questions, problems or suggestions.

SPMS Author: Matthew Arena — Fermi National Accelerator Laboratory

Timestamp: 16-DEC-24 10:38 (UTC)

JACoW SPMS Version 11.1.13

[JACoW Legal and Privacy Statements](#)

[Add Another Affiliation](#) [Add A Private Address](#)**User Affiliation**[Edit Affiliation](#)

European Organization for Nuclear Research (CERN) Email Address duarte.galvao@cern.ch  
 Information Technology Department (IT)  
 Esplanade des Particules 1  
 CH - 1211 Geneva  
 Mail Stop  
 PO Box  
 Telephone

**Note:** Your profile must always contain at least one affiliation. You cannot delete the last affiliation. Create a new affiliation first, then delete the unwanted one.

User Information	Citizenship Information
Last (Family) Name Galvão First (Given) Name Duarte Middle Name Alexandre Initials D. A. Gender Male	Country Time Zone GMT Date Format dd-MON-yy hh24:mi 16-DEC-24 10:43 (GMT)
Membership Information	Mailing Lists
Member Affiliation  <b>No</b> APS DPB <b>No</b> European Physical Society <b>No</b> IEEE <b>No</b> IUPAP <b>No</b> Institute of Physics <b>No</b> National Physical Society <b>No</b> TWAS	<b>List Conference</b> <b>No</b> Beam Cooling <b>No</b> International Conference on Cyclotrons and their Applications <b>No</b> International Symposium on Electron Beam Ion Sources and Traps <b>No</b> Electron Cyclotron Resonance Ion Source <b>No</b> International Workshop on Accelerator Science and Technology for Electron-Ion Collider <b>No</b> ICFA ABDW Workshop on Energy Recovery Linacs <b>No</b> International Free-Electron Laser Conference <b>No</b> ICFA ABDW Workshop on Future Light Sources <b>No</b> ICFA ABDW Workshop on Hadron Beams <b>No</b> Heavy-Ion Accelerator Technology <b>No</b> International Beam Instrumentation Conference <b>No</b> International Conference on Accelerator and Large Experimental Physics Control Systems <b>No</b> International Computational Accelerator Physics Conference <b>No</b> Advanced Beam Dynamics Workshops <b>No</b> International Particle Accelerator Conference <b>No</b> Linear Accelerator Conference <b>No</b> Mechanical Engineering Design of Synchrotron Radiation Equipment and Instrumentation <b>No</b> ICFA ABDW Workshop on Nano Beams <b>No</b> North American Particle Accelerator Conference <b>No</b> Personal Computers and Particle Accelerators Controls <b>No</b> Russian Particle Accelerator Conference <b>No</b> Symposium on Accelerator Physics <b>No</b> Superconducting RF <b>Yes</b> JACoW Team Meeting <b>No</b> Test Mailing List <b>No</b> ICFA ABDW Workshop on eeFact

## SPMS (the downfall)

- Became unmaintainable by the early 2010s
- Constant security issues
- Currently hosted at CERN

# 2013

# A Unique Conference Management Tool for CERN and JACoW

This document explains the reasons why CERN and JACoW<sup>1</sup> should converge towards a unique conference management software tool, describes a path for this convergence and the resources needed to bridge this gap and reach a new mutually beneficial state of collaboration.

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## Current situation

For historical reasons, CERN and JACoW use their own internally-developed conference management software packages. They were both created in the early 2000s, and grew in parallel. The SPMS<sup>2</sup> for JACoW is used by all major JACoW conferences, and is developed by Matt Arena from FNAL. Indico<sup>3</sup> is used at CERN (hosting ~330,000 events) and in 160+ institutes

*Executive Summary: The convergence of the CERN Indico software and the JACoW SPMS is of strategic importance for both parties. It could be reached through a 1-person 3.5 years project in 10 work packages. The effort could be reasonably shared between stakeholders and beneficiaries, especially the CERN accelerators and research sectors.*

<sup>1</sup> JACoW web site - <http://www.jacow.org/>

<sup>2</sup> SPMS - <http://www.jacow.org/index.php?n=Tools.SPMS>

<sup>3</sup> Indico CERN server: <https://indico.cern.ch/> Indico distribution web site: <https://indico.github.io/>

# A collaboration is born

- First participation of Indico members in JACoW Team Meeting in December 2013
- First draft for the Indico-JACoW project plan by Thomas Baron in December 2015
- In hindsight: vastly underestimates the work needed

## Development resources

The total resources needed for the implementation of these work packages amount to a total of **35.1 months of work**. A CERN employee working for **three and a half years** could theoretically do the job. A **CERN Fellow** would be the appropriate level of recruitment for this project.

# First kick-off

- A 132-page specification was drafted in April 2016
- Very detailed action items
- Estimated 4 years worth of work in total

This document aims at providing an in-depth analysis of the SPMS features with regards to their Indico counterparts, identifying the features which are already handled by Indico, and those which would need to be added to Indico. It will also provide a porting path and a reliable estimate of the needed resources for the porting.

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# But, there was a problem...

## Roles

- Project Manager: Pedro Ferreira
- Development team: PJAS + entire CERN Indico team
- JACoW representative(s): ?



The solution?

WORKING TOGETHER

# ☁️ Working together ☁️

- In 2019, after it was first tested by JACoW members, it wasn't ready to run any conference
- In 2021, Ivan Andrian (Elettra Sincrotrone Trieste) was designated as the JACoW-Indico Manager
- Since then, we've regular meetings to keep up with the project's status
- Started using a Kanban board

The screenshot shows a GitHub project board for the 'JACoW suggestions to Indico' repository. The board is organized into six columns: Suggestions, Backlog, Approved, In Progress, Under Review, and Done. Each column contains several items, each with a title, description, and a small circular icon indicating its status or type. The 'Done' column has the most items, while the others have fewer. The items in the 'Approved' and 'In Progress' columns appear to be user stories or feature requests, while the others are likely bugs or tasks.

# ☁️ Working together ☁️

- In August 2022 JACoW ran its first large conference (fully) on Indico

The screenshot shows the FEL2022 conference page on Indico. At the top, it says "FEL2022" in large red letters, followed by the dates "Aug 22–26, 2022" and location "Trieste Convention Centre, Europe/Zurich timezone". A sidebar on the left has links for Overview, Scientific Program, Call for Abstracts, Timetable, Contribution List, Author List, Book of Abstracts, Mobile App, and Registration. Another sidebar lists the "FEL2022 Local Organiser Committee" with emails for info@fel2022.org, program@fel2022.org, and registration@fel2022.org. The main content area includes a summary of the conference, details about the organizing center, and contact information for the local organizers.

**FEL2022 Trieste, Italy, August 22–26**

On behalf of the International Executive Committee of the FEL Conference series, we are pleased to announce the 40th International Free Electron Laser Conference (FEL2022), to be held at the Trieste Convention Center (TCC) in Trieste, Italy, from August 22th to August 26th, 2022.

FEL 2022 will focus on recent advances in free electron laser theory and experiments, electron beam, photon beam, and undulator technologies, and applications of free electron lasers.

This edition is organised by Elettra Sincrotrone Trieste, an international, multidisciplinary research centre specialised in the generation of synchrotron and free-electron laser radiation together with their applications in material and life sciences.

The conference programme will include an optional tour of FERMI and the Elettra Storage ring.

Visit the official website at <https://www.fel2022.org> for further information.

**Starts** Aug 22, 2022, 8:45 AM  
**Ends** Aug 26, 2022, 1:00 PM  
Europe/Zurich

Trieste Convention Centre  
Auditorium Generali  
viale Miramare, 24/2  
Trieste - Italy

Luca Giannessi  
Michele Svandrik

final\_proceedings  
Conference photos  
FEL2022-0-logo-header.jpg

- Since 2023, there have been no more conferences run on SPMS

# 🌈 Working together 🌈

- In the past couple of years, we've had a much closer collaboration

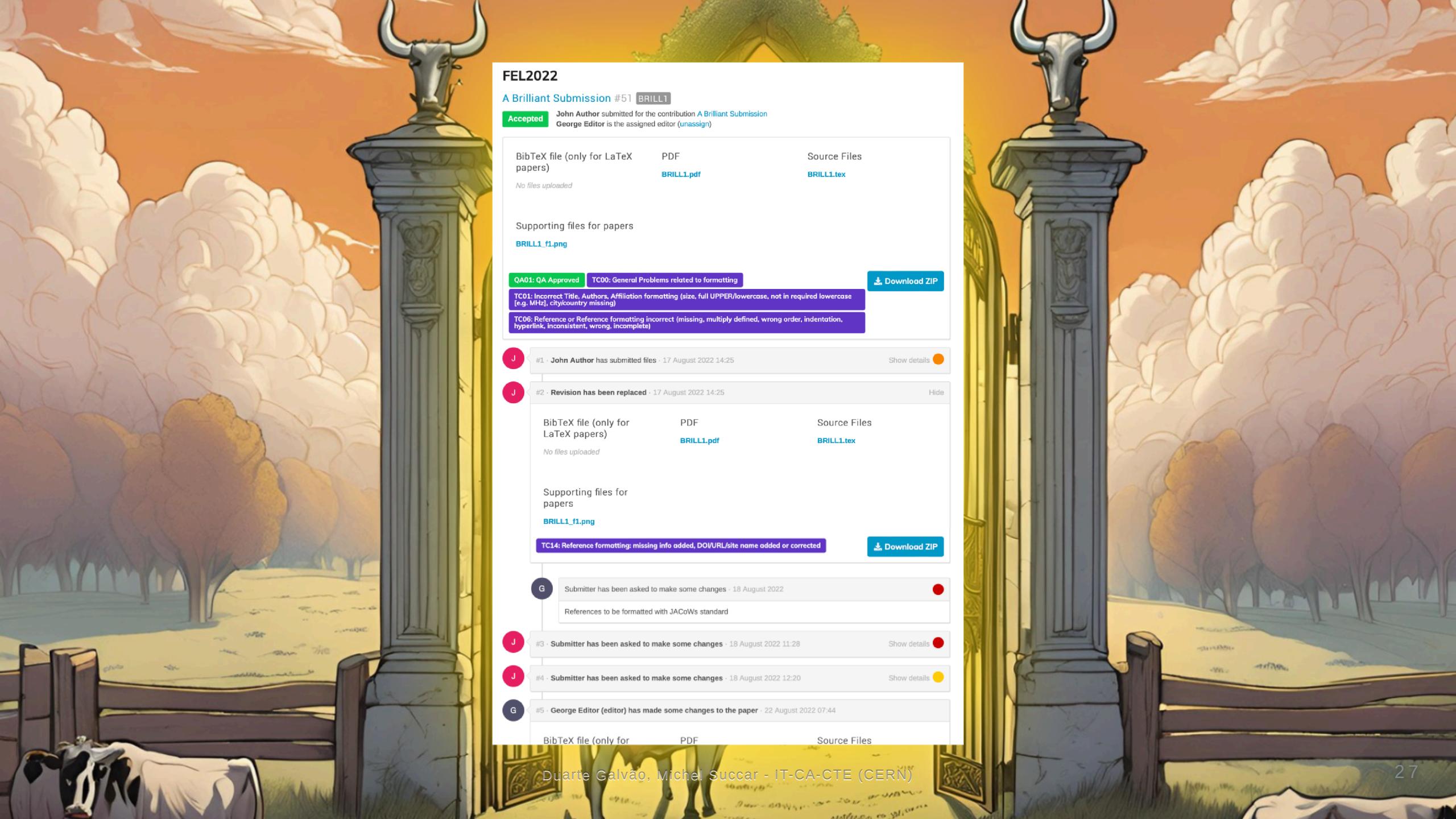


*JTM'23, Hsinchu, Taiwan*



*IPAC'24, Nashville, TN, USA*

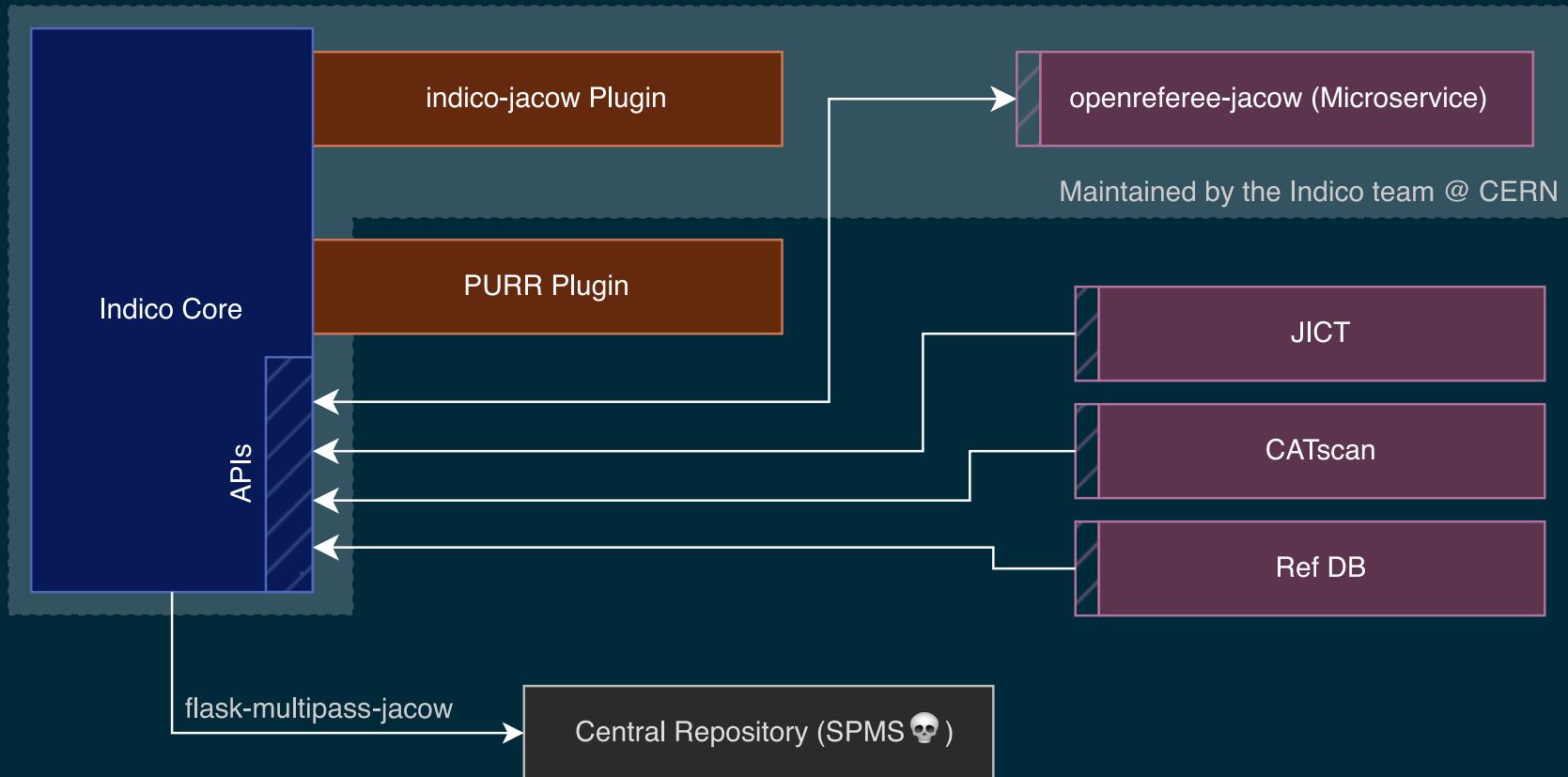
# 2024



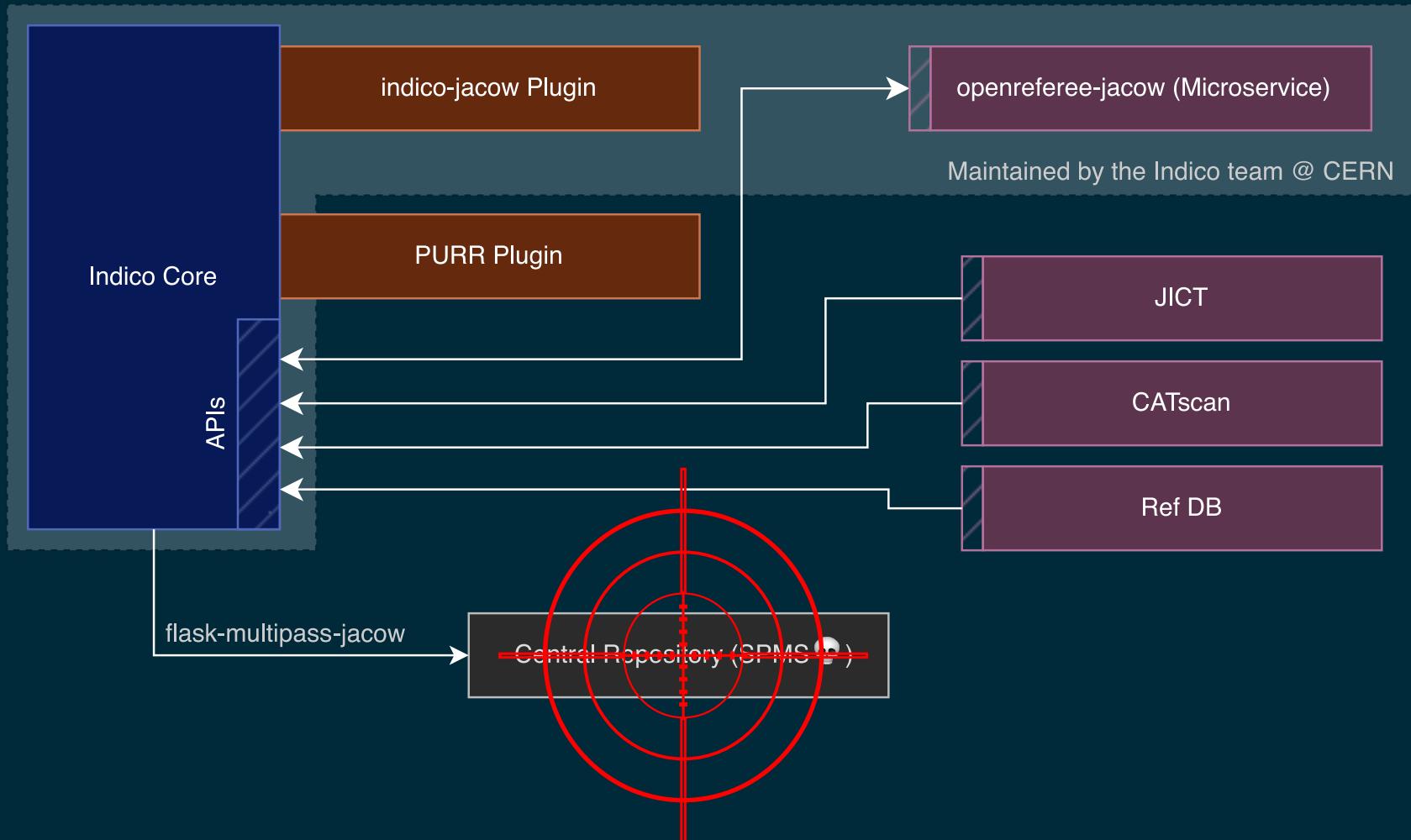
# Our approach to JACoW requests

- Useful for the entire community
  - Indico Core
- Mostly for the JACoW community, but still quite general
  - Indico Core, as a setting
- Specific to JACoW use cases
  - highly linked to Indico
    - JACoW Plugin or Microservice
  - loosely related to Indico
    - JACoW's problem ;)

# What is JACoW? (our POV)



# What is JACoW? (our POV)



# Past year's progress

- We went to IPAC24

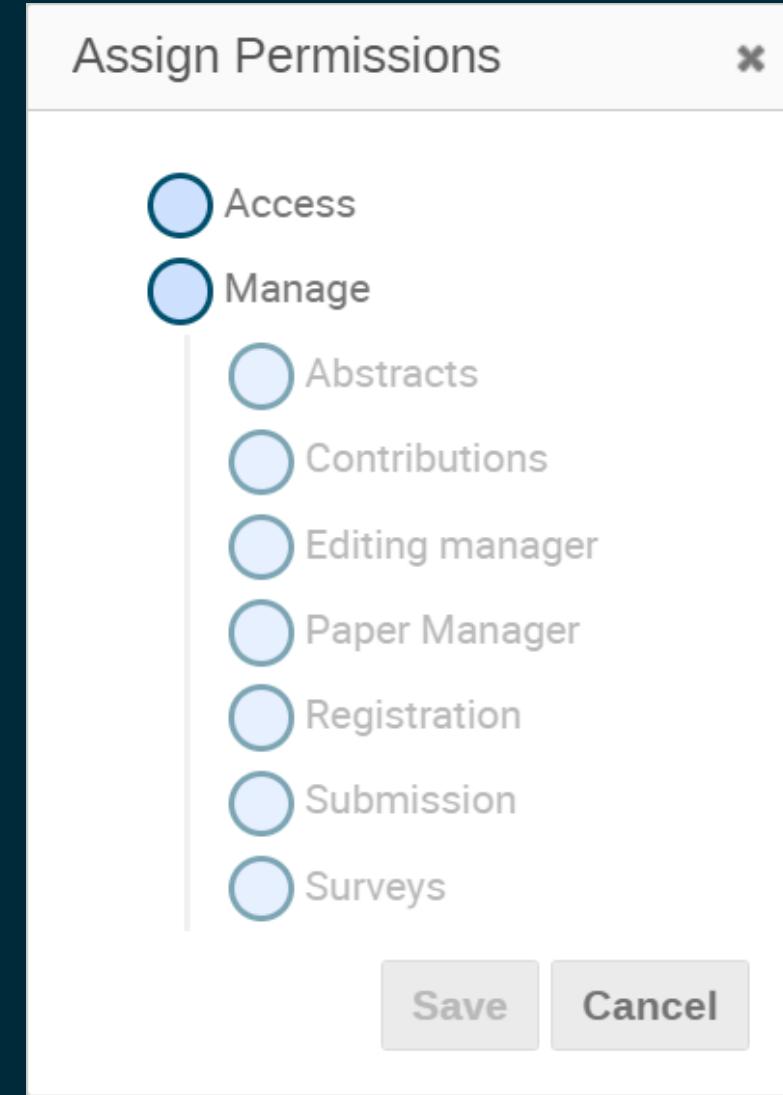


# Past year's progress

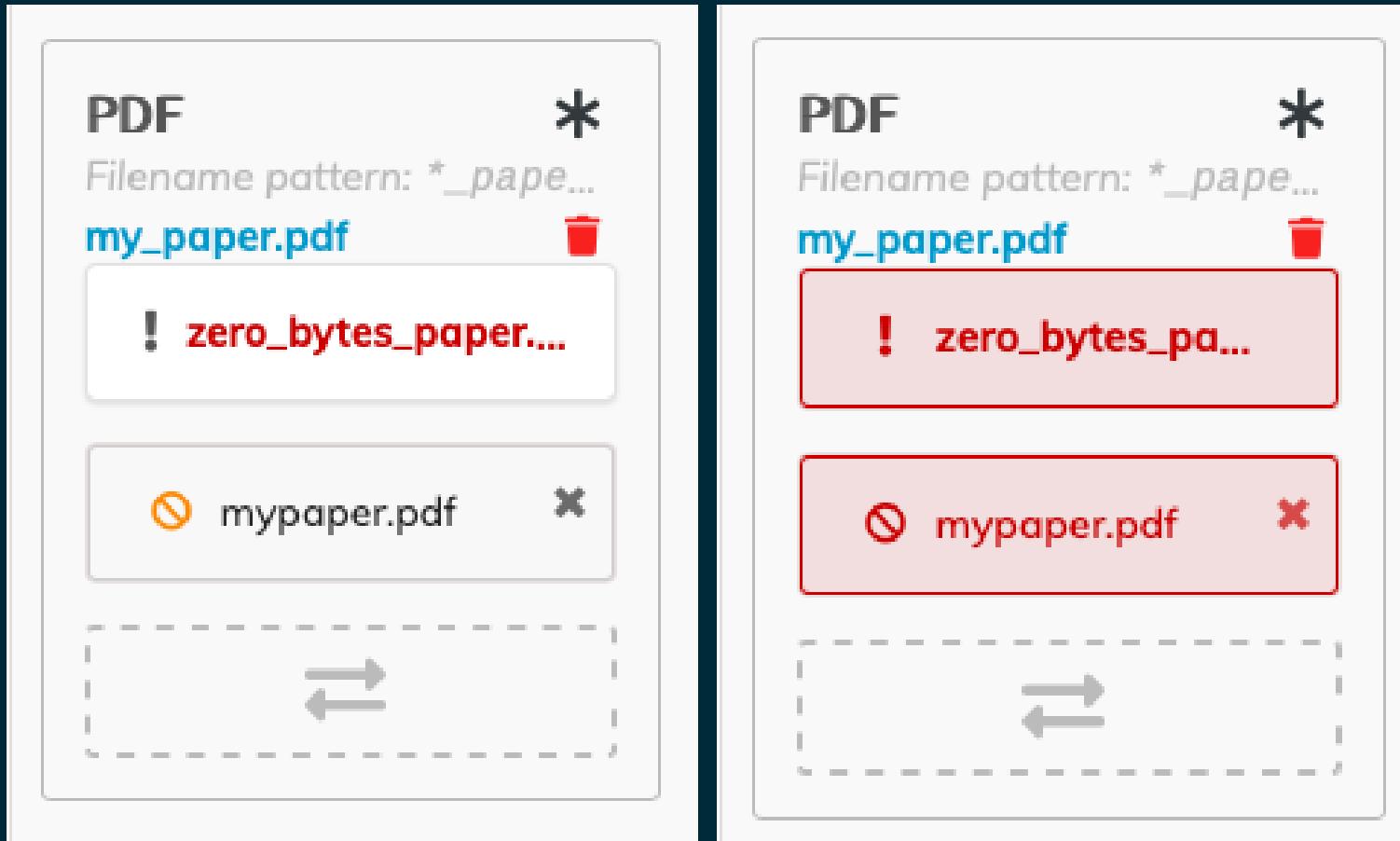
- We went to IPAC24
  - and we took notes!
  - <https://cern.ch/ipac24notes>

Type	Problem	Priority	Solution
New feature	A restricted group of people need to be able to edit the contributions' titles and author lists. However, the only way to allow this is to give them full management access to the whole event, which is confusing for them and can be dangerous.	Low	A new permission type that only allows managing contributions.
New feature	The label for the "internal" setting in comments is "Restrict visibility of this comment to other editors", which caused some confusion regarding whether this means that comments are visible only to other editors or not.	Low	Change the label text to something such as "Restrict visibility of this comment to other editors only".
New feature	On the contribution page, there is a "go to timeline" button that links to its corresponding Editing Timeline. However, this button is only shown the contribution's submitters, meaning that managers and editors need to manually search the editable list to find the corresponding timeline.	Low	Show the button to everyone who has the "can_see_timeline" permission.
New feature	The error messages in the revision files upload form are very discrete - a white box with a red/orange icon. This causes confusion in both submitters and editors, as they often can't tell what's wrong when trying to make a revision.	Medium	Make the error boxes more prominent. Preferably fully red.
Bug	When searching on the "Get Next Editable" dialog, the search results are highlighted but they are not pushed to the top, forcing editors to scroll through hundreds/thousands of editables to find the scattered ones.	Medium	Change display order of editables when applying a search filter.
Bug	When applying a filter on an editable list for papers, it also shows up in the editable list for posters, even though it might not make sense.	Medium	Add an editable type and event id to the session storage key for the filter.
New feature	It is necessary to freeze certain information, namely the contribution's description and title, in order to properly conduct the editing process. However, it is still useful to allow submitters to fix the state.	Medium	Provide more options in the "Submitter Privileges" dialog to enable/disable title, description and persons.
Bug	When doing a Fail QA action (reset_editable) on an editable that has gone from "Needs Submitter Confirmation" to "Approved", only the last revision is undone, and although the editable goes into "ready for review", the actions don't reflect this state, and is instead waiting for submitter confirmation.	High	Ideally no revisions should be undone. An editable should simply be forced on review. We need to check the editables rather than the last revision's state which actions can be performed.
New feature	The current way to upload files and approve a revision is to do a "Request Approval" action (marked with a yellow dot) and then, on the confirm button, open a dropdown and select "Confirm and Approve". This creates confusion, since the intended action is to approve and not to request approval. Many editors forget the final "Confirm and Approve" step, and since they cannot judge revisions in the "Needs Submitter Confirmation" (yellow) stage, they have to undo and redo the whole revision, which often means reuploading.	High	Allow uploading files when performing "Approve" judgment, similar to the "Request Changes". This action should create a single "approval" revision containing the files.
New feature	After a revision is made by an editor, it sometimes might be necessary to fix the list of tags. Currently, it is only possible to edit the revision text.	Low	Let the editor edit the tags as well as the revision text.
New feature	There are plans to use an external service to provide mailing lists functionality for JACoW conferences. However, Indico does not support any such integrations.	Low	Display the mailing list preferences dashboard, with information coming from the provider's API. Additionally, display in the conferences' registration form.

# Contributions ACL permission



# Revision files upload errors



# Refactor ReviewForm

- Judge button on editing revisions
- Switching between actions on the editing timeline erases comment



# Upload files on "Approve" judgment

Your decision

THIS REVISION NEEDS EDITING

Upload files

PDF \*

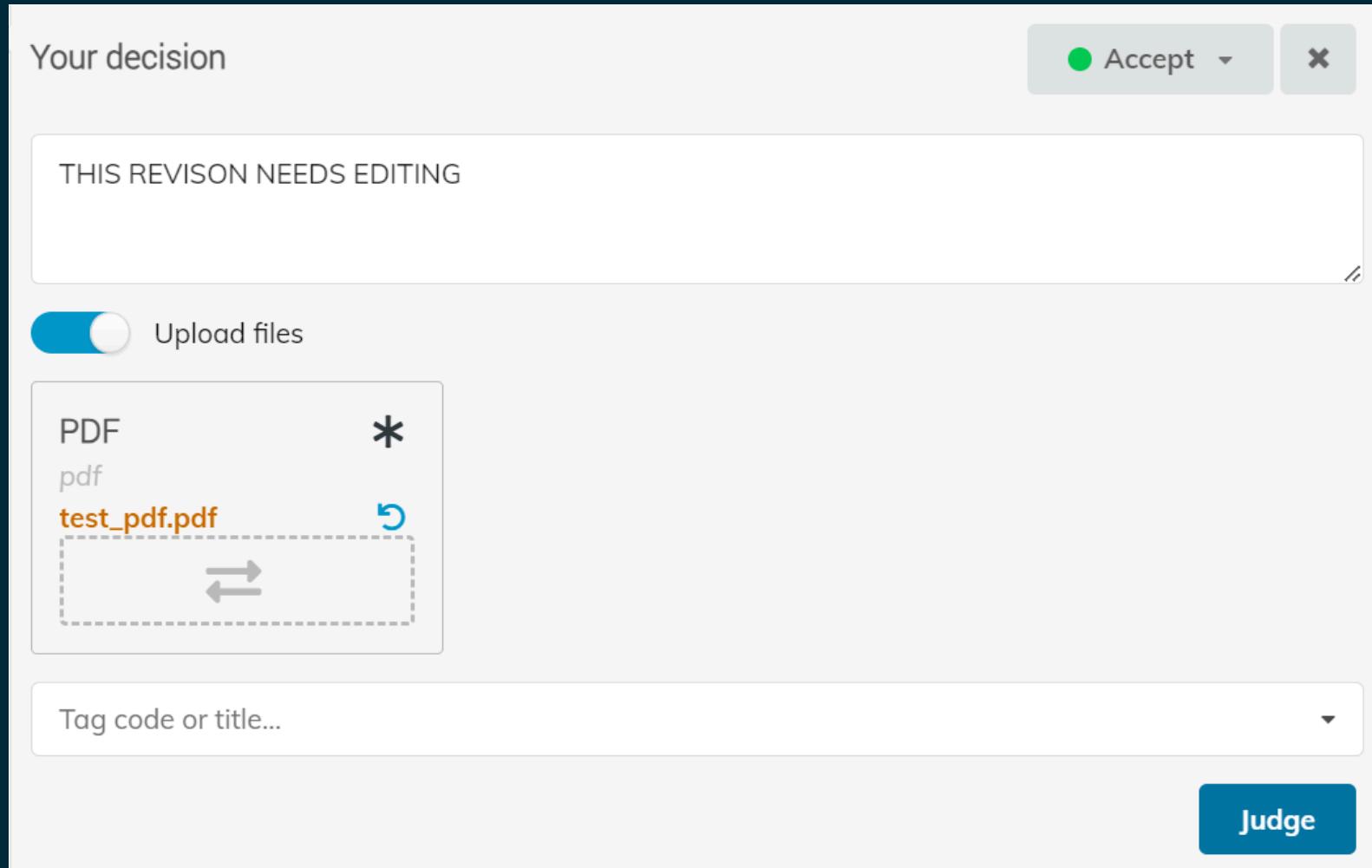
pdf

test\_pdf.pdf



Tag code or title...

Judge



## Future of the Indico-JACoW Collaboration

- (Finish) implementing feedback from IPAC24
- Abandon SPMS/Central Repository and use Indico as the sole source of identities
  - Ability to add authors manually after search result returns empty
  - Integration with new mailing list service
  - Implement custom fields for user profiles
  - Add ORCID & ROR integration with user profiles
- UI/UX improvements in Contributions/Abstracts management



Pictured: me presenting to all of the active SPMS developers @ Music City Center, Nashville, TN, USA

# Bonus slide: JACoW Editing Workflow

