



**IT management for a conference:
software requirements, setup, and
installation specifications
(IPAC25)**

Ping Shun (David) Chuang

16th International Particle Accelerator Conference



NSRRC
Taiwan Photon Source



JUNE , 2025

1

Student Poster
Registration
Welcome Reception

2

Opening Plenary Talks
Chair's Cocktail
Parallel Scientific Sessions
Exhibition, Posters

3

Parallel Scientific Sessions
Posters, Exhibition
PRE Session

4

Parallel Scientific Sessions
Exhibitions, Posters
Session for Industry

5

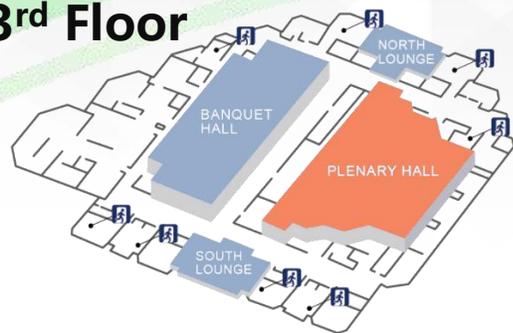
Parallel Scientific Sessions
Awards Ceremony /**Entertainment
Talk**

6

Exhibition, Posters
Conference Banquet
Plenary Talks
Closing Remarks
Facility Tour

IPAC25 Venues

3rd Floor



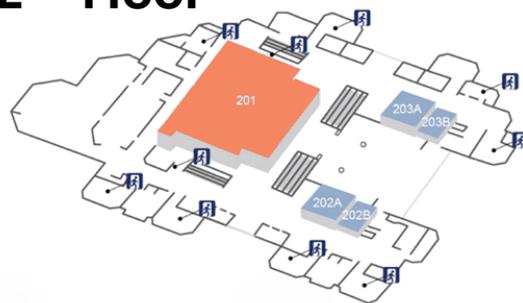
Plenary Hall
Opening Ceremony

Conference Venue

Taipei International
Convention Centre



2nd Floor

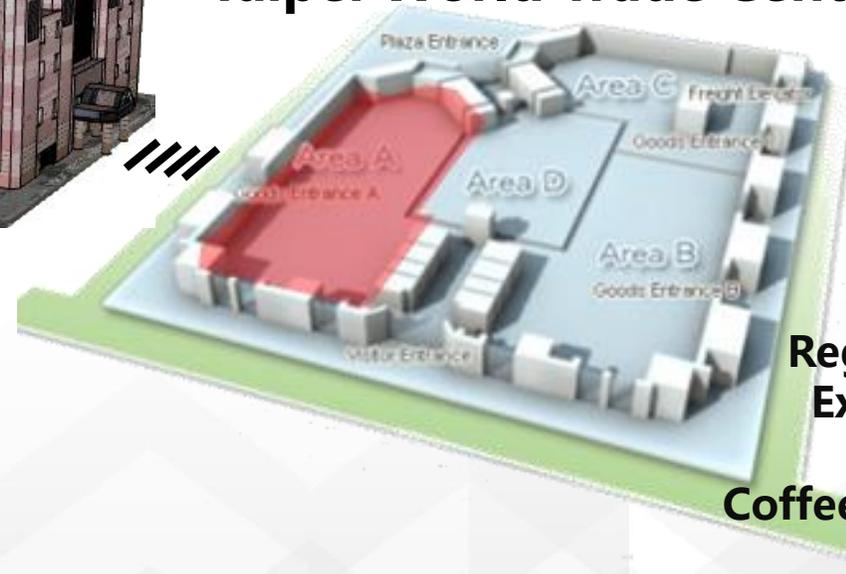


Room 201
Scientific Session
(Parallel B)



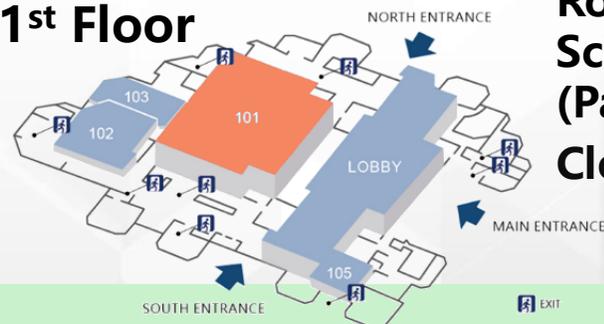
Exhibition Hall

Taipei World Trade Center



Registration
Exhibitions
Posters
Coffee break &
Lunch

1st Floor



Room 101
Scientific Session
(Parallel A)
Closing and Award Ceremony



OC Chair

Ming-Chyuan Lin (NSRRC)



SPC Chair

Yoichi Sato (KEK/J-PARC)



LOC Chair

Jui-Che Huang (NSRRC)



Scientific Secretariat

Stella Su (NSRRC)

Team A



- Venue Arrangements
- P.C.O. Meetings
- Sponsorship
- Finance
- Conference Hotel
- Registration
- Entertain. Talk

Team B



- JACoW Team
(~ 1300 papers processed)
- Oral Presentation (86 talks)
- Proceedings Office – IT Team
- Related Software Setup
- Conference Website
- Regular Announcement

Team C



- Light-Peer-Review (Max. 120)
- Student Posters & Grants (Max. 80)
- ACFA / IPAC25 Awards
- Posters (Max. 1300)
- Facility Tours
- Conference APP

Team D

- SPC Chair : Dr. Sato, KEK
- Scientific Program
- Industry Session
- Productive Research Environment
- Sessions & Events



Proceeding Office

TICC – Conference (7 computers)

TWTC –Area A and Proceedings office (45 computers)



Opening Hours
08:15-17:00

Exhibition Hall Taipei World Trade Center



2F

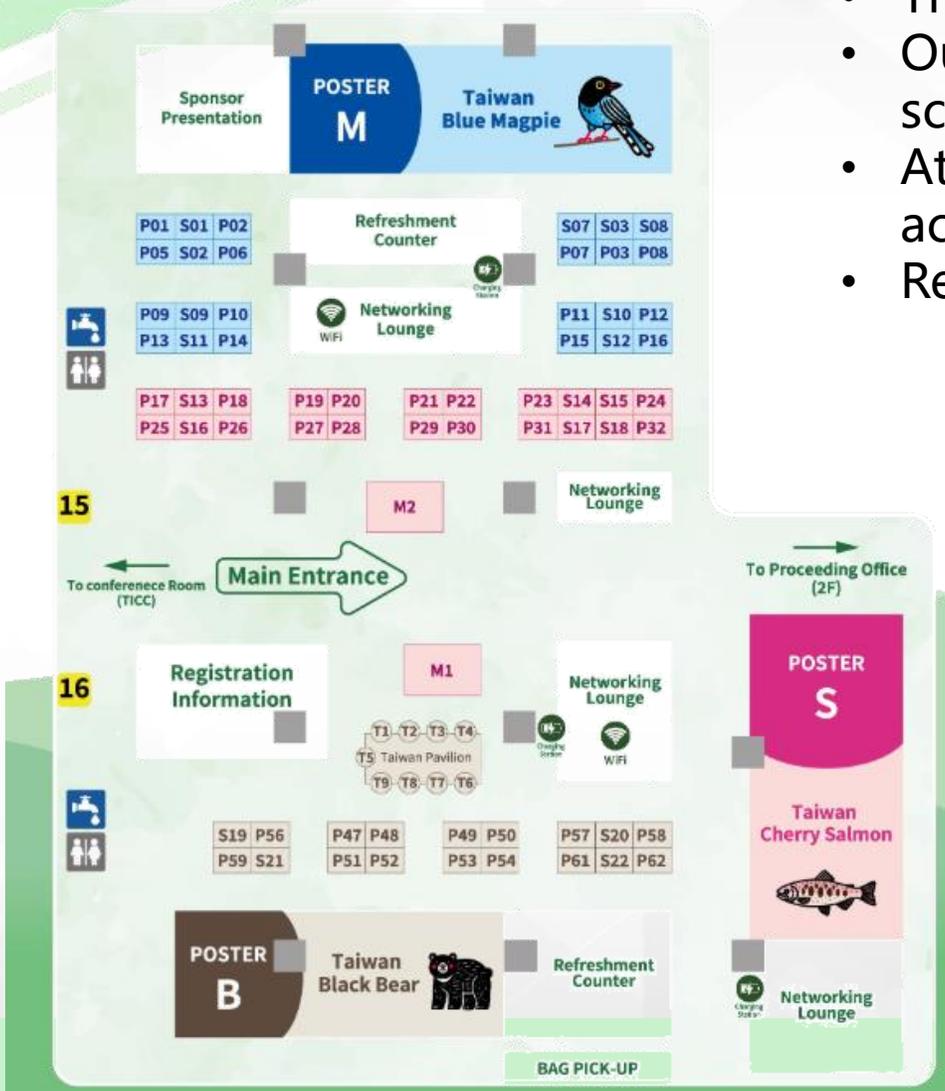
WiFi

- The conference venue was provided.
- Our goal is for participants to be fully engaged with the scientific sessions.
- Attendees are encouraged to visit the exhibition hall for internet access.
- Reliable Wi-Fi is essential to ensure our exhibitors are satisfied.



- Speed : $\geq 1G$
- Location: North and South Lounge, JACoW proceeding office, meeting

2F





Registration Flow of IPAC'25



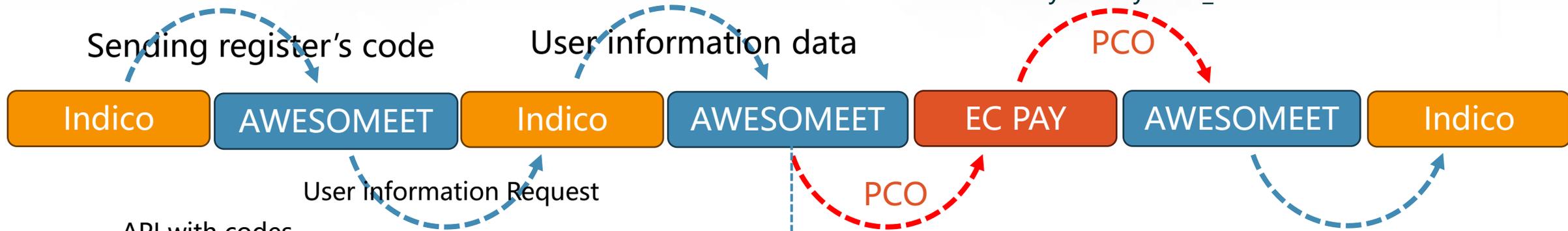
(PCO) pcoserver

https://pcoserver...../script.asp?code={event_id}.{registration_id}.{registration_db_id}.{registration_form_id}

{event_id}→81 → IPAC'25 event
{registration_id}→17
{registration_db_id}→ 5896→ (everyone different)
{registration_form_id} →70→ Indico Registration Form Number

Example : [https:// pcoserver...../ script.asp?code=81.17.5896.70](https://pcoserver...../script.asp?code=81.17.5896.70)

paid status linked to Paymentsystem_ID



API with codes

Send a GET request to indico

To get the information about the registration, send a GET request to https://indico.jacow.org/api/checkin/event/81/forms/70/registrations/{registration_db_id}

Create API token generated from IPAC25 Registration manager account (IPAC25REG)
Authentication: Bearer {*****}

Indico
Family name
First name
E-mail
Facility
Country
ID
Registration type
<input type="radio"/> Full
<input type="radio"/> Student

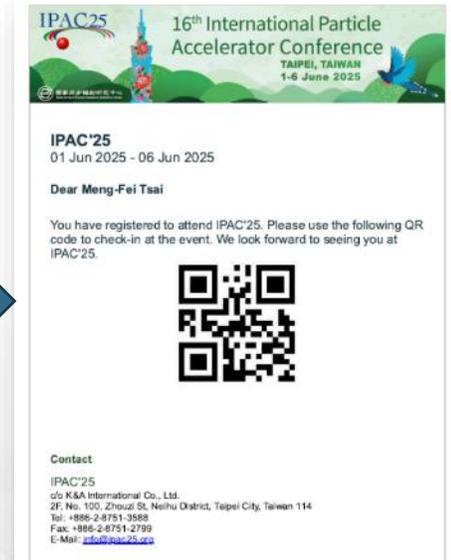
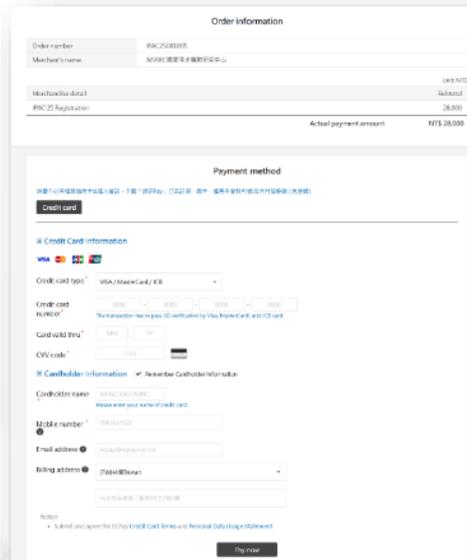
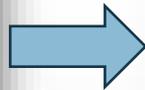
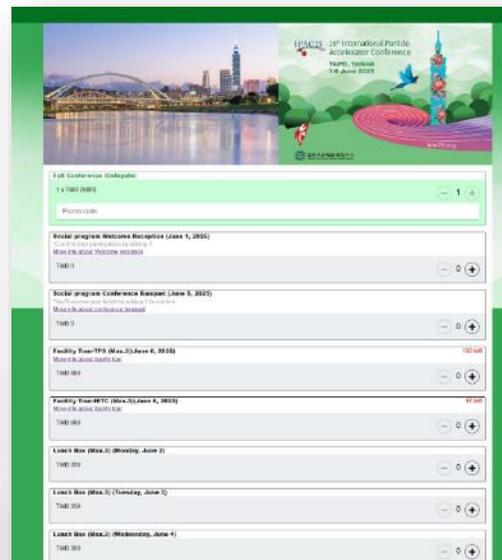
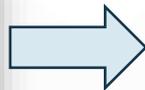
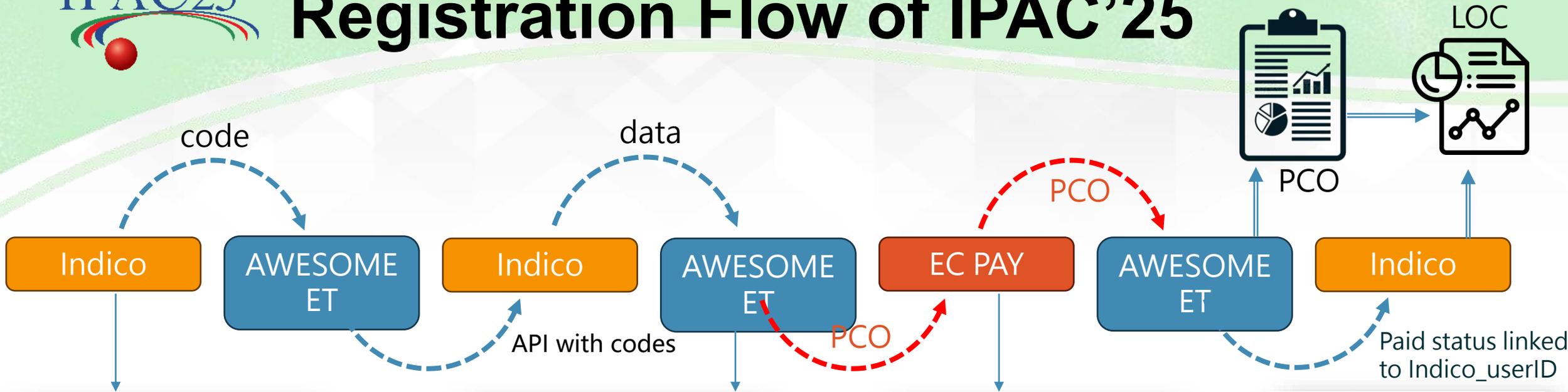
AWESOMEET
Family name (from Indico)
First name (from Indico)
E-mail (from Indico)
ID (from Indico)
Facility(from Indico)
Country(from Indico)
Registration fee (from Indico) (Delegate / Student/ Exhibitor)
<input type="checkbox"/> Welcome reception
<input type="checkbox"/> Conference Benguet
<input type="checkbox"/> Laboratories tour <input type="radio"/> NSRRC <input type="radio"/> HiTC
Lunch Box (TWD X00 per day)
<input type="checkbox"/> Monday <input type="checkbox"/> Tuesday <input type="checkbox"/> Wednesday <input type="checkbox"/> Thursday
<input type="checkbox"/> Accompany person _(name)_ with full social events TWD X000
<input type="checkbox"/> Additional Banquet ticket TWD X000
Discount code _____
<input type="button" value="PAY"/>
<input type="button" value="Print Invoice"/>

paid status linked to indico_userID
Once the payment is successful, send a POST request

Send a POST request to https://indico.jacow.org/event/81/manage/registration/70/registrations/{registration_db_id}/toggle-payment,
ex: curl --request POST --url <https://indico.jacow.org/event/81/manage/registration/70/registrations/5896/toggle-payment> -H "Authorization: Bearer {indp_*****}" --form "pay=1"



Registration Flow of IPAC'25



Hardware List

Proceedings Office

- 30 x Windows laptops
- 30 x 27" 2k resolution monitors for dual monitor
- 2 floor-standing laser printers

Author Reception

- 3 Windows laptops

Speaker Preparation

- 4 PC Windows laptops
- laptop setup should be identical to the Auditorium

Auditorium

- 4 laptops for each auditorium
- 1 Spare for each on-hand
- 2 x 27" floor-standing screens : one shows a timer, and the other simultaneously plays a slideshow

Satellite Meetings

- 2 Laptops
- Projector or larger TV with stands as needed

Registration desk

- 4 Laptops
- 3 Self-service check-in machines

Dot Board/ conference information

- 3 Raspberry Pi (low-cost single-board computer)
- 3x 75" LED TVs with stands

Poster Police

- 18 x Apple iPad Air



PC Hardware for Editing

Compact and no UPS is needed during the IPAC.

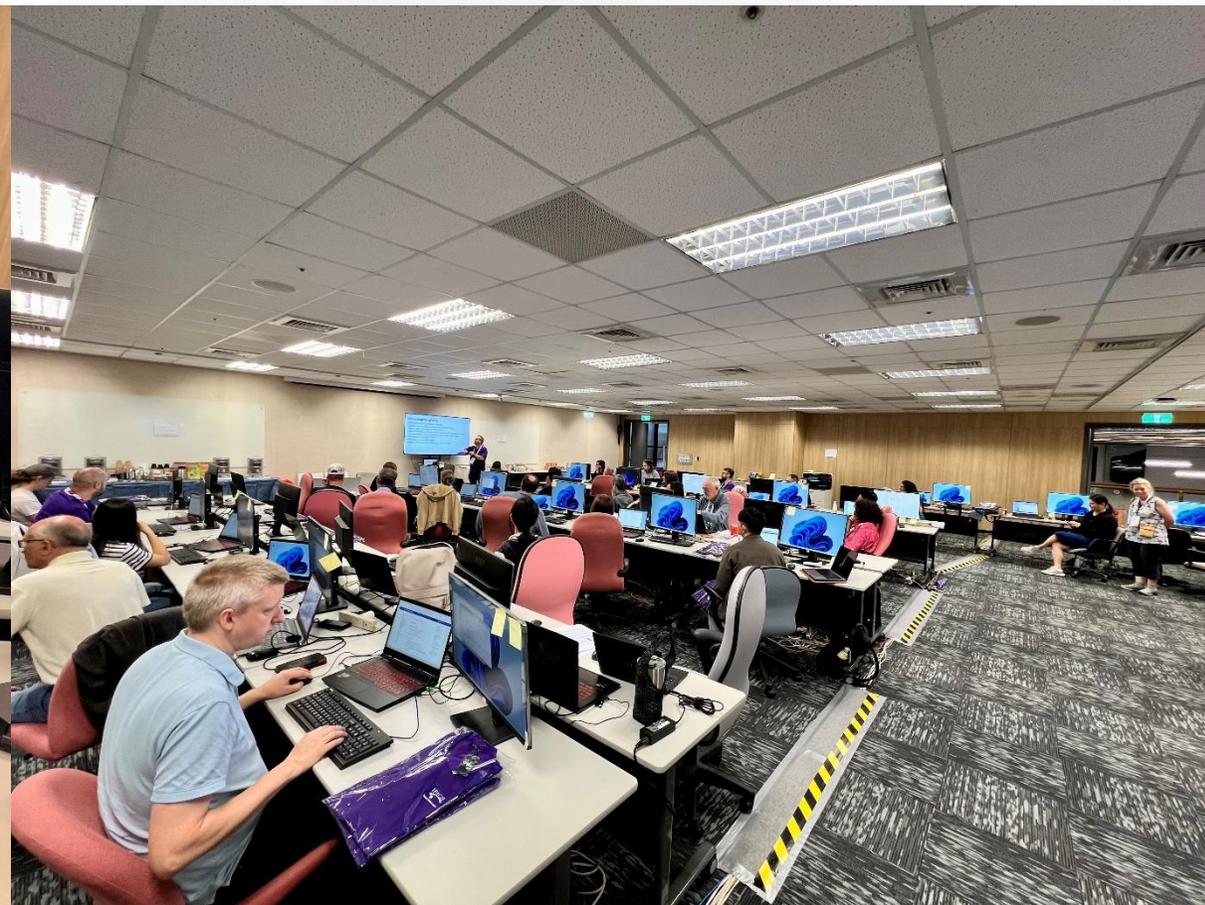


MSI GF63 Gaming Notebook with High performance

- Laptop Specifications Brand: MSI Thin GF63 15.6
- Processor: Intel i7 –i12650H
- Memory: 32GB
- RAMStorage: 512GB SSD × 2
- Graphics Card: GPU RTX3050
- Operating System: Windows 11
- Office Software: Microsoft Office 2024
- Accessories: Mouse and external keyboard
- Maintenance Service: Includes troubleshooting and spare unit replacement
- Display Support: Laptop must be able to connect to an external monitor
- Ethernet: Wired 1Gbps
- ExtraMonitor: 27 inch



IPAC25 Proceeding Office



IPAC'25
TAIPEI TAIWAN

Cloud Storage and Printer

1. Multi-port 1Gbps Intranet switches + Rental Internet Router
2. Two NAS for routine backup
3. Two Floor-standing photocopier :(Copying speed: 30 pages per minute in black and white / 30 pages per minute in color / with fax, print, and scan functions)*



FUJIFILM A7D3372X

Printing Function

- Memory: 4GB
- Hard Drive: 160GB
- Equipped with a dual paper feeder; even during duplex printing, speed is not reduced, greatly improving productivity.
- Warm-up time: Within 24 seconds; first copy time — monochrome: 4.4 sec / color: 5.7 sec
- Automatic duplex printing and output, simplifying operations and improving efficiency.

Built-in Controller

- High-speed quad-core processor: Intel® Core™ i5 A4476F, 1.5 GHz

Print Resolution

- 1,200 × 2,400 dpi

TV and IPAD



16th International Particle
Accelerator Conference



- Apple iPad Air
- Number : 18
- For Post Police
- Connect to JICT



- 75-inch TVs
- JACoW editing room
- Dotting Board x3
- Information board x1
- Sponsor presentation x1

PC Software for Editing

- OS: Windows 11 (English)
- Office 365
- Acrobat Pro DC (30-day trial version) with "JACoWSetDot.js"
- MiKTeX 23.x with "jacow.cls"
- TeXstudio 4.x
- Pitstop Pro (30-day trial version)
- Parameter setting:
[https://indico.jacow.org/event/84/attachments/595/2113/JTM2024 Computer Setup JACoW Confereces-simplified.pdf](https://indico.jacow.org/event/84/attachments/595/2113/JTM2024%20Computer%20Setup%20JACoW%20Confereces-simplified.pdf)
- JACoW-12.joboptions



Software List

1. LibreOffice 7.6.5
2. Firefox
3. Google Chrome
4. JACoW Acrobat configuration
5. JACoW JobOptions(JACoW-11) properly installed in Acrobat DistillerEnfocus
6. Pitstop Professional 2022 licenses of 30 day trial (activate trial only before conference)
7. Notepad++
8. WinEdt (30 day trial)
9. EditPlus
10. Gvimfor Windows
11. 7Zip
12. Ghostview, GSView, GhostScript
13. ssh client: e.g., PuTTY
14. IrfanView
15. XnView
16. MiKTeX(User Mode install, not Admin install)
17. JACoW LaTeX classfile properly installed
18. TeXStudio(first choice) + TeXnicCenter/TeXmakeras a TeXGUI
19. Meld (for diff/merge)
20. VLC
21. GIMP
22. Paint.NET
23. DoubleCommander (OpenSource) or SpeedCommander (30-Day Trial)
24. Handbrake
25. VirtualDub
26. PPspliT-Microsoft Office must be installed before installing PPspliT
27. Adobe Acrobat Professional (one month subscription)

Installing Fonts

- barcode_font
Download: https://github.com/JACoW-org/AcrobatPitStopTools/tree/master/barcode_font
- LiberationMono
- tex-gyre-math
- tex-gyre-terms



Final Check for Laptop Setup

Acrobat

- 1. Hamburger menu -> `Disable New Acrobat`
- 2. Update Acrobat to latest version (Help -> Check for updates)
- 3. Set `JACoW-12` joboptions in Distiller
- 4. Set Distiller preferences:
 - a. Ask for PDF file destination
 - b. View PDF when using Distiller
 - c. Ask to replace existing PDF files
 - d. Delete Log files for successful jobs
- 5. Acrobat settings:
 - a. Convert From PDF -> Encapsulated Postscript -> Font emitting: All fonts -> Edit settings -> Uncheck "Convert TrueType to Type 1".
 - b. Set the editor name in Identity panel



Final Check for Laptop Setup(cont.)

Firefox

- 1. Set Firefox as default
- 2. Check updates, download if needed, restart to apply them
- 3. Install plugins:
 - a. Foxy gestures
 - b. uBlock origin
- 4. Set Acrobat as default PDF application
- 5. Set the default homepage to `[https://ipac-docs.jacow.org/PaperEditing/IPACs/IPAC25/`](https://ipac-docs.jacow.org/PaperEditing/IPACs/IPAC25/)



Final Check for Laptop Setup(cont.)

Word

- 1. Options:
 - a. Save -> Preserve fidelity when saving this document -> check `Embed only the characters used in the document ...`
 - b. Advanced -> Display -> Show measurements in units of: `Points`
- 2. Acrobat -> Preferences -> Choose `JACoW-12` as PDFMaker conversion settings



Final Check (update-po.bat)

```

@echo off
echo.
echo update right click menu
reg.exe add "HKCU\Software\Classes\CLSID\{86ca1aa0-34aa-4e8b-a509-50c905bae2a2}\InprocServer32"
/f /ve
taskkill /IM explorer.exe /F
explorer.exe

echo .
echo update miktex packages update JACoWSetDot.js
copy \\192.168.1.202\SharedFolder\JACoWSetDot.js "C:\Program Files\Adobe\Acrobat
DC\Acrobat\Javascrpts"

echo.
echo update miktex packages
miktex packages update

echo update miktex Qt packages
miktex packages update

echo.
echo update JACoW class file
mkdir "C:\Users\User\AppData\Local\Programs\MiKTeX\tex\latex\jacow"
copy \\192.168.1.202\SharedFolder\jacow.cls
"C:\Users\User\AppData\Local\Programs\MiKTeX\tex\latex\jacow"
mktexlsr
texhash

```



Presentation Office

◆ Clear Signage

Clearly display the **Presentation Office hours and location**.

◆ Presentation File Check

Speakers should **verify their presentation files** at least **half a day** before their session.

◆ Identical Laptops

Session room laptops are **identical to test laptops** to ensure smooth file playback.

◆ Laser Pointers

Same laser pointers will be used in all rooms.

Speakers will be guided on usage.

Spare batteries must be available.

◆ Devices Needed

- **6 laptops**
- **1 large monitor**
- **3 standard monitors**



Signage

Presentation Office Preparation

- **Upload Station**

1 computer is available for presenters to upload their files.

- **File Check Station**

2 computers with 1 shared monitor for file testing.
(Switchable setup to minimize wait time.)

- **Server Upload**

Files should be uploaded to the shared server in advance to counter last-minute changes before the session.

- **Editing Station**

3 computers are available for on-site file editing.



Laptops and shared monitor for presentation file



Auditorium Setup for Speakers

- **Timer**

A timer is provided for speakers to manage their presentation time.

- **Monitors**

Two monitors are available:

- One displays the slides, allowing speakers to face the audience while presenting.
- The other shows the transcript for speaker reference.



Monitors and the timer for speakers





Conference APP

Contents of the purchased plan (IPAC25)

NAME	DESCRIPTION	PRICE (€)	
PACKAGES			
BASIC	Up to 200 participants; basic features*	199	
BASIC PRO	Up to 400 participants; pro features*	299	
UNLIMITED	Unlimited number of participants; basic features*	399	
UNLIMITED PRO	Unlimited number of participants; pro features*	549	
BRANDED APP	Unlimited number of participants; pro features*	849	
ADDITIONAL FEATURES			
BASIC / BASIC PRO / UNLIMITED / UNLIMITED PRO packages	Fast-track	Publishing mobile agenda in less than 14 days from receiving signed order	50
	Custom feature	New feature; NOT from basic or pro features lists*	contact us
BRANDED APP package	Fast-track	Publishing mobile agenda in less than 28days from receiving signed order	100
	Custom modification	f.e. fonts, alignments, buttons, new tabs	contact us
	Custom feature	New feature; NOT from basic or pro features lists*	contact us
OTHER FEES			
BASIC / BASIC PRO / UNLIMITED / UNLIMITED PRO packages	Missing 1st deadline	Providing Basic Materials** later than 14 days before mobile agenda publish date	50
	Missing 2nd deadline	Providing Basic Materials** later than 7 days before mobile agenda publish date	100
BRANDED APP package	Missing 1st deadline	Providing Basic Materials** later than 28 days before mobile agenda publish date	50
	Missing 2nd deadline	Providing Basic Materials** later than 14 days before mobile agenda publish date	100
	Missing modification request deadline	Change in branded app after deadlines mentioned in the Terms of Service document	50

conference
mobile assistant



<https://conference4me.psncl.pl/en/>

Basic features include:

- Agenda with sessions and presentations available offline
- Possible application content updates whenever Internet is available
- Ongoing view with currently active sessions and presentations
- Live streaming for sessions and presentations
- Timing of agenda adaptable to participant's device settings (for correct data provision in

Conftool, Indico, EDAS and Softconf CMS)

- Personalized My Agenda view with calendar sync
- Conference news (delivered via Twitter channel or #hashtag)
- Notes section which lists all notes added by participant
- Push notifications of important information from *Conference Organizers* (enabled on demand)
- Venue info with Hotels info section
- Maps section with conference location, building plans and exhibition map image/s
- Section for other useful info f.e. travel info, public transport, restaurants, wifi
- List of authors, speakers, session chairs, discussants
- Conference partners / sponsors section
- Web version of agenda for other clients (enabled on demand)
- Integrated search functionality
- 2 mobile platforms (iOS, Android)
- Supported languages: English, German, Spanish, French², Portuguese, Chinese², Polish²

Pro features include:

- Easy search mechanism
- List of exhibitions with description
- Voting for best stand in exhibition
- **Clickable maps with exhibition stand location**
- Push notifications for important informations from *Conference Organizers*
- Rating session and presentation with comments
- Chating on sessions and presentations
- Links to surveys about event, feedback, questionnaires
- Anonymous participation statistics to estimate the size of the room

APP Milestones

1	<p>Request initial order</p> <p>Fill in Order Form to quickly receive summary and evaluation of your request. If you have any doubts about app features, please check FAQ.</p>	
2	<p>Confirm initial order evaluation</p> <p>We will send you an e-mail with summary of your initial order form. Now we need confirmation of selected features list and price. We will wait for your message.</p>	
3	<p>Sign all documents and make a payment</p> <p>After receiving the confirmation, we will prepare all documents for you. When you receive them, please read them and sign in indicated places. You will also receive information about deadlines and instructions of how to provide things required to start the app development.</p> <ul style="list-style-type: none"> • payment • list of required materials 	
4	<p>Provide required materials</p> <p>Please send us collected materials before the deadline. The list of required materials depends on the chosen package, but for sure we will need</p> <ul style="list-style-type: none"> • access to initial version of mobile agenda. • rectangled logo image 	
5	<p>Gain access to Conference4me Organizer Panel</p> <p>We will grant you an access to Conference4me Organizer Panel where you can modify your conference data at any time. This is also a signal, that we've started the development of mobile app for you. If you ordered a branded app package, please remember that no changes in app design later than 21days before conference start date¹ are included. Changes via Conference4me Organizer Panel are of course available at any time.</p>	
6	<p>Receive an e-mail about completion of app development</p> <p>Providing that you've sent all we needed in previous steps before the first deadline, we should inform you about successful app development.</p> <ul style="list-style-type: none"> • 2 weeks before the conference for branded app package* • 1 week before the conference for other packages* <p>* If you order Fast Track option, deadlines are customized</p>	
7	<p>Enjoy your conference!</p> <p>Now it is a time to test the app and use it on your conference!</p> <p>Let us know ASAP if some change requests appear to make it possible to discuss, evaluate and implement.</p>	

Release on multiple platforms



IPAC25 Apple store IPAC25 logo (Web)



Google play store



Add Poster ID Sequence

2025 after

討論會資訊



16th International Particle Accelerator Conference

We are so pleased and honored to welcome you all to the 16th international particle accelerator conference (IPAC'25), to be held on 1-6, June, 2025 at Taipei, Taiwan. The event will be hosted by the National Synchrotron Radiation Research Center. The IPAC'25 edition is a collaborative effort organized by accelerator communities in Asia, Europe, and the Americas. It will be an international event with a rich scientific program covers worldwide advancements in state-of-the-art accelerator research and development, gaining insights into new projects, and staying abreast of the latest developments in accelerator facilities globally. Besides, participants will have the valuable opportunity to connect with peers and establish new business contacts. With an expected attendance of over 1,000 delegates and 80 industry exhibitors, IPAC'25 promises to be a remarkable and significant event.

Taipei, the capital of Taiwan, embracing both modernity and tradition, offering vitality and warm smiles. Taipei will surely become your one of the most cherished memories in Asia. As you explore the city, you'll be enchanted by its rich and diverse cultural characteristics. The beauty of Taipei also lies in its coexistence between the urban and the natural. A few minutes' drive, and you can immerse

議程 事件時區

6月 2025

01 週日	02 週一	03 週二	04 週三	05 週四	06 週五
09:00	Opening				
09:30	Plenary Hall				
09:30	Plenary before coffee				
10:30	Plenary Hall				
10:30	Coffee Break				
11:00	Exhibition Hall				
11:00	Plenary after coffee				
12:30	Hall 101_Ground Floor				
12:30	Lunch				
14:00	Exhibition Hall				
14:00	MOZD: Colliders and Related Accelerators (Invited)				
15:00	Hall 101				
15:00	MOZN: Accelerator Technology and Sustainability (Invited)				
16:00	Hall 201				
15:00	MOCD: Colliders and Related Accelerators (Contributed)				
16:00	Hall 101				
16:00	MOCN: Accelerator Technology and Sustainability (Contributed)				
16:00	Hall 201				
16:00	Monday Poster Session: MOPB				

議程 我的議程

2025 before

Monday Poster Session: MOPB

週一, 6月 2, 下午 4:00 - 下午 6:00
位置: Exhibiton Hall A _Bear

添加到我的議程

A novel design of a magnetic chicane with positive R56

Hitoshi Tanaka

An alternative lattice for the ZIPS storage ring

Lei Guo

An IGBT pulser for the nonlinear in-vacuum kicker at Taiwan Photon Source

Chyi-Shyan Fann

Analytical model for the transition to superradiance in seeded free-electron lasers

River Robles

Application of fast algorithms to calculate dynamic and momentum aperture to the design of ALBA II

Thomas Günzel

Averaged FEL algorithm to simulate

Tuesday Poster Session: TUPB

週二, 6月 3, 下午 4:00 - 下午 6:00
位置: Exhibiton Hall A _Bear

添加到我的議程

下午 4:00
下午 6:00

TUPB001: J-PARC neutrino beamline upgrades towards 1.3 MW beam power for long baseline neutrino oscillation experiments in Japan

Tetsuro Sekiguchi

下午 4:00
下午 6:00

TUPB002: Consideration for improving the longitudinal beam matching between RCS and MR at the J-PARC

Hidefumi Okita

下午 4:00
下午 6:00

TUPB003: Beyond 1 MW operation of the J-PARC RCS

Kota Okabe

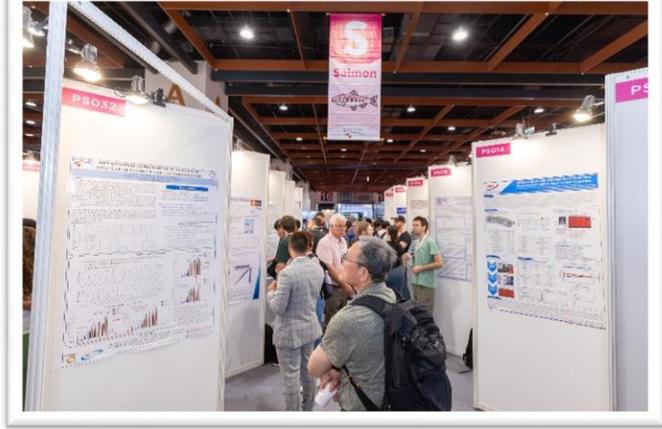
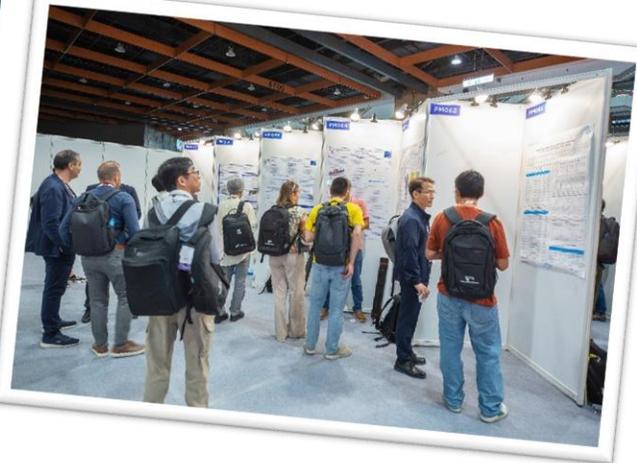
下午 4:00
下午 6:00

TUPB004: Measurement of the transversal Muon Rate at the proposed CODEXb experiment with the Timepix3 Radiation Monitor

Daniel Söderström

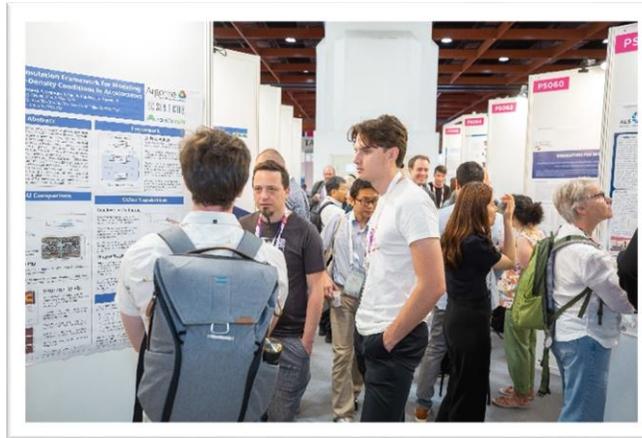


IPAC'25
TAIPEI TAIWAN



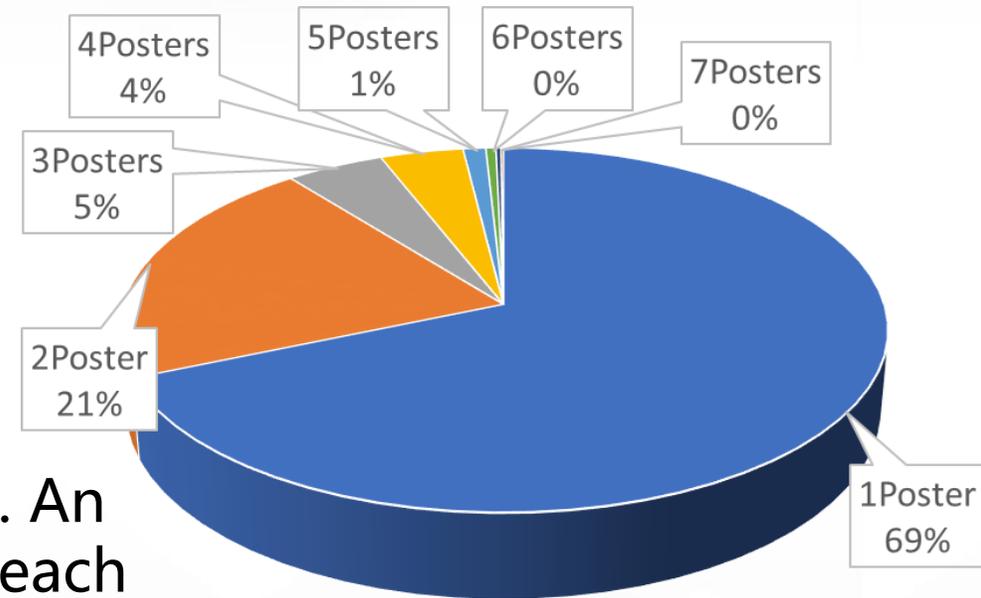
POSTER

250 posters per day
More than 1,000 posters



Editor Workload and Poster Presentation Policy

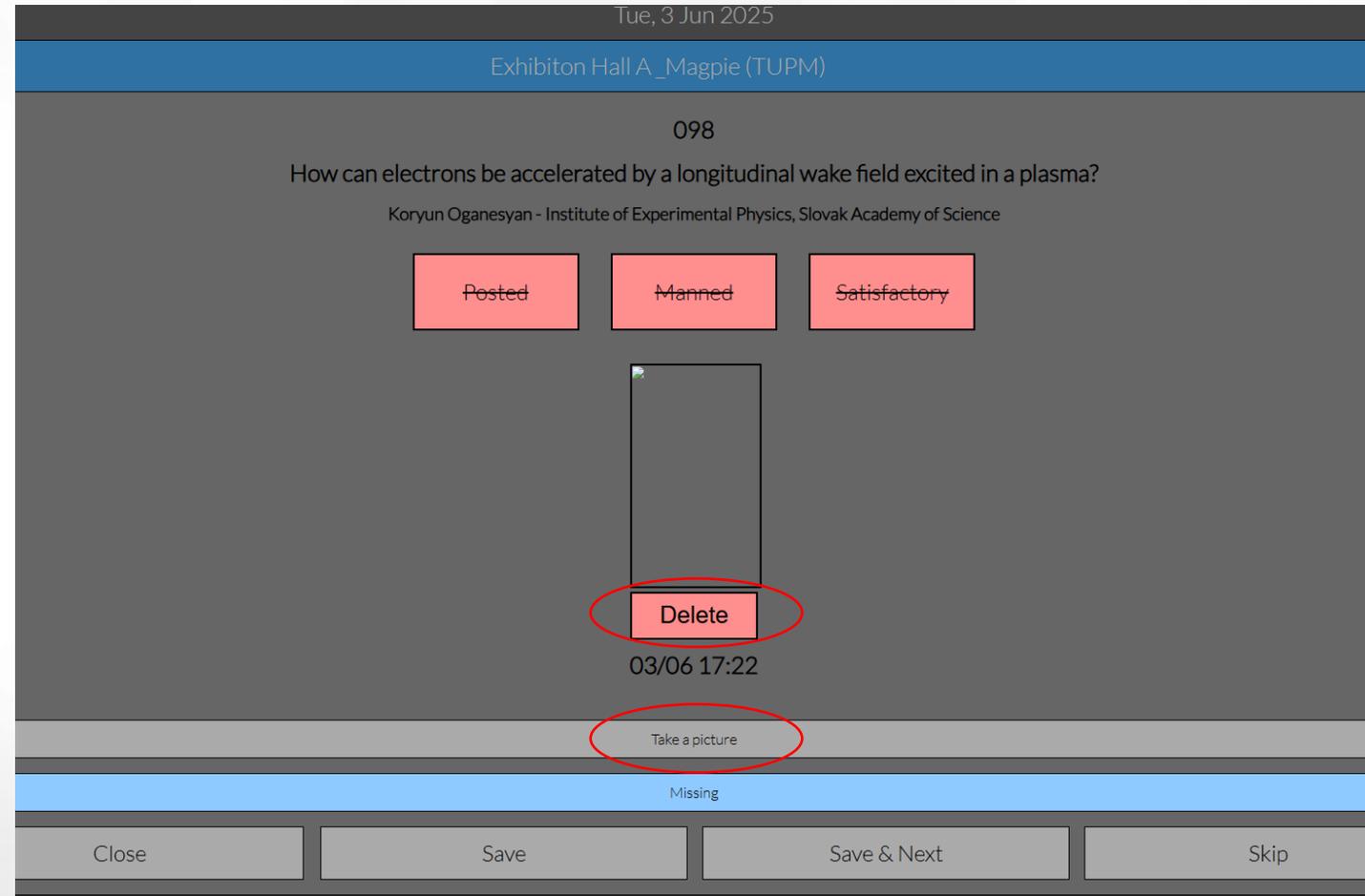
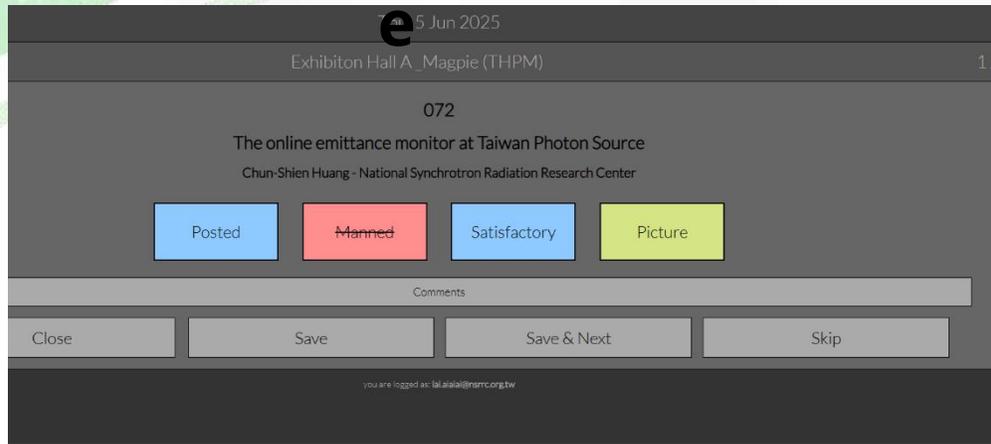
- Each editor can handle approximately 5 to 8 papers per day. So it is important to keep the poster presentation limit per delegate to ensure a manageable workflow and smooth review process.
- For IPAC'25, an extra charge will apply for exceeding the poster limit: Each delegate may present up to four posters. An additional fee of USD 200 will be charged for each poster beyond this limit.



Timeline of Posters Setup

- **Indico time table missing contribution** → unable to edit or display → cannot connect with JICT
→ Provided **paper ID / Session_ID / session_block_ID / date** (24 Mar)(Michel).
- At the same time, because the JICT automatic-assignment function could not be used → **assigned numbers manually** (due to the light peer-review application deadline).
- **manual assignment** was completed (29 Mar), organized by category and name, also classified by registration status.(Ivan)
- Thanks to Michel for **fixing the error** of missing contribution (17 Apr).
- **Discovered an incorrect link between JICT and Indico**, which caused student poster data to be missing.
- student session blocks were reconfigured, and **the linking issue was solved** (23 Apr).(Ivan, Stefano)
- **JICT server setup** (15 May). (Stefano)
- **agenda.php created**, which enables poster numbers to be displayed in the mobile app (22 May). (Stefano)
- **Poster Police App optimized**, improving photo upload speed, and adding new features — photo capture and photo deletion (31 May). (Stefano)

Befor



1. improving photo upload speed
2. adding new features — photo capture and photo delete caption





Summary

Scale: We successfully processed approximately 870 papers, supported 86 oral presentations, managed over 1,200 poster presentations, and provided seamless IT services across two major venues for six days.

Hardware Success: The standardized approach with 30 identical MSI gaming laptops, dual monitors, and comprehensive support equipment proved reliable throughout the conference.

Software Complexity: The extensive software stack with 27 applications, custom configurations, and automated deployment scripts ensured editors had all necessary tools.

Integration Challenges: Connecting Indico, AWESOMEET, EC PAY, JICT, and the mobile app required significant problem-solving, but ultimately provided a seamless experience for attendees.

Summary

Key Success Factors:

- Standardization of hardware and software
- Automation through scripts like update-po.bat
- Clear team structure and responsibilities
- Redundancy in critical systems
- Responsive problem-solving by skilled team members

Areas for Improvement:

- Better capacity planning for poster sessions
- Enhanced network reliability for photo uploads
- Earlier integration testing to catch linking issues

Final Thought: Managing IT for a major international conference requires meticulous planning, skilled team members, automated systems, and the flexibility to solve unexpected problems quickly. With proper preparation and the right team, even the most complex technical challenges can be successfully managed.