



# CERN Status and News

Plenary RRB 58<sup>th</sup> Meeting

Joachim Mnich

April 22<sup>nd</sup>, 2024

# Main Discussion Points 58<sup>th</sup> LHC RRB

## M&O budget requests for 2025

- Note December 2023 Council resolution Russia & Belarus
- and Council discussion on JINR (Dubna) expected in June 2024

## Status & Progress Phase II Upgrades ATLAS and CMS

- Schedule and cost developments

## Phase IIb upgrades ALICE and LHCb

- Special meetings on Wednesday

# Scrutiny Group Members 2024

Frey, Ariane	University of Göttingen, DE	(Chairperson)	
Schmidt, Burkhard	CERN, EP Department	(Scientific Secretary)	
Cochran, James	Iowa State University, US		*
d'Hose, Nicole	CEA-IRFU, FR		*
Gys, Thierry	CERN, EP Department		
Marshall, Philipp	SLAC National Accelerator Laboratory, US		*
Pepe, Monica	INFN Perugia, IT		
Pöschl, Roman	IJCLab, IN2P3, FR		
Rozycka, Agata	CERN, FAP Department		
Schwanda, Christoph	Institute of High Energy Physics, Vienna, AT		
Troska, Jan	CERN, EP Department		
Vossebeld, Joost	University of Liverpool, UK		*

\* : new member

# Collaboration with Russian and Belarus Institutions

Council Resolution December 15<sup>th</sup>, 2023:

[Council] **DECIDES** To terminate the International Cooperation Agreement between CERN and the Russian Federation, together with all related protocols and addenda, with effect from 30 November 2024;

To terminate, *mutatis mutandis*, all other agreements and experiment memoranda of understanding allowing the participation of the Russian Federation and its national institutes in the CERN scientific programme, with effect from 30 November 2024;

**AFFIRMS** That these measures concern the relationship between CERN and Russian and Belarusian institutes and do not affect the relationship with scientists of Russian nationality affiliated with other institutes;

**AND REAFFIRMS** That all decisions taken to date by the Council and all the actions undertaken by the Management remain in force.

(see <https://council.web.cern.ch/en/content/resolutions>)

Note:

- Equivalent resolution decided for Belarus: ICA termination date 27 June 2024
- Experiments will present the 2025 M&O A/B requests excluding any contributions from Russia or Belarus but including the expected contributions from JINR and **alternative tables without 2025 contributions from JINR**

# Implementation of Council Resolution on Russia\*

\* To be applied accordingly to Belarus

Consequences of the [Council Resolution](#) on the ICA termination with Russia:

- No user status possible anymore for people affiliated to a Russian institute after the expiration of the ICA on 30 Nov 2024
- No visits to CERN

Two implementation issues have been discussed with the 4 large LHC experiments for people affiliated to a Russian (Belarussian) institute :

- Authorship: apply the rules established in the collaborations typically people sign papers for one more year after leaving the experiment
- Access to data, important for e.g. students to finish their thesis for selected people (students, advisors) and for limited time (1 year):
  - grant external status (EXTN-DIST) to keep CERN SSO indispensable for data analysis
  - extension possible, to be reviewed case by case

## EXTN-DIST:

Externals with the reason DIST are entitled to a computer account, only. Other services or facilities are not available. As these persons are teleworking, for example for an official or informal project, they will not be physically present at CERN.

- Will discuss with all other CERN experiments and propose similar procedures

# CERN Associate Member States

Brazil is now Associate Member State

- The first one in Latin America
- Agreement signed in March 2022
- President's signature on 12 March 2024 concluded internal ratification procedure
- Agreement became law on 13 March

CERN family April 2024:

## 23 Member States

Austria – Belgium – Bulgaria – Czech Republic  
Denmark – Finland – France – Germany – Greece Hungary – Israel – Italy  
– Netherlands – Norway - Poland – Portugal – Romania – Serbia – Slovakia  
Spain – Sweden – Switzerland – United Kingdom

## 3 Associate Member States

in the pre-stage to membership

Cyprus – Estonia – Slovenia

## 8 Associate Member States

Brazil - Croatia – India – Latvia – Lithuania – Pakistan -Türkiye – Ukraine

## 6 Observers

Japan – Russia (suspended) – USA - European Union – JINR (suspended) – UNESCO



March 3, 2022:

New applications for associate membership  
from Chile and Ireland

- CERN Council nominated Task Forces
- Country visits took place



# Prévessin Data Centre

- ❑ Phase 1 for 4 MW was completed successfully at the beginning of 2024 with a net saving of 5 MCHF on the allocated budget
  - ❑ Inauguration February 23rd, 2024



The inauguration of the new data centre in Prévessin. From left to right: Pippa Wells, CERN's Deputy Director for Research and Computing; Charlotte Warakaulle, CERN's Director for International Relations; Aurélie Charillon, Mayor of Prévessin-Moëns; Joachim Mnich, CERN's Director for Research and Computing; Yves Nussbaum, Director Marché Industrie, AXIMA; and Enrica Porcari, Head of Information Technology Department at CERN. (Image: CERN)



- ❑ Future plans:
  - ❑ WLCG requirements indicate a need for the Phase 2 upgrade to 8 MW ahead of Run 4
  - ❑ Phase 2 upgrade foreseen 2027-mid 2028
  - ❑ Estimated budget 12 MCHF



# Science Gateway

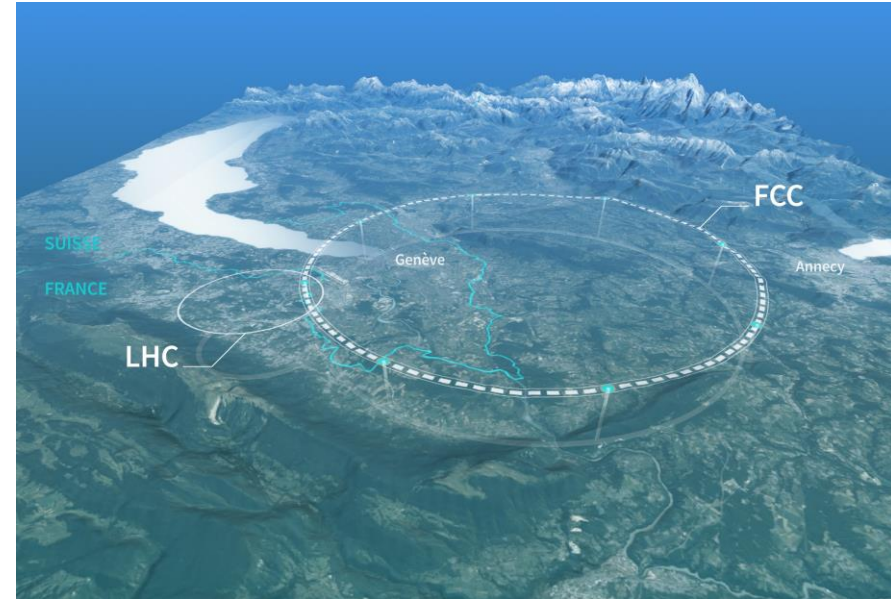
- ❑ Over 144 000 visitors since 8 October 2023 (day of opening to the public) from 142 countries.
- ❑ More than 1000 visitors/day on average





# Other News

- ❑ Midterm report FCC feasibility Study reviewed by CERN Council in February 2024
- ❑ Update European Strategy for Particle Physics launched by CERN Council
  - ❑ 2024: establishment of all committees, selection of meeting venues
  - ❑ 2025: submission of scientific input by community, community Open Symposium and drafting of Strategy document
  - ❑ 2026: Council discussion and update of the Strategy
- ❑ Visit French and Swiss Presidents in November 2024



# Symposium to honour Herwig Schopper

- ❑ Former CERN DG
- ❑ Turned 100 years earlier this year
- ❑ Symposium with excellent speakers describing his truly outstanding achievements in science and science management



## Herwig Schopper

### a century in physics

A symposium to mark the 100th birthday of Herwig Schopper

**Friday 1 March 2024**

14:00 – 18:00  
MAIN AUDITORIUM

**Details and registration at:**  
<https://indico.cern.ch/event/1366175/>

#### **Timetable and speakers:**

*Chair: Joachim Mnich*

**14:00** Introductory remarks from Doris and Andreas Schopper

**14:20** Herwig's career in Germany: Albrecht Wagner

**14:45** A scientifically diplomatic career: Samuel Ting

**15:15** Developments in hardware: Christian Fabjan

**15:35** Coffee break

*Chair: Charlotte Warakaulle*

**15:55** Director-General of CERN: Chris Llewellyn-Smith

**16:15** The UNESCO years: Maciej Nałęcz

**16:35** SESAME: Eliezer Rabinovici and Khaled Toukan

**16:55** Closing words: Fabiola Gianotti

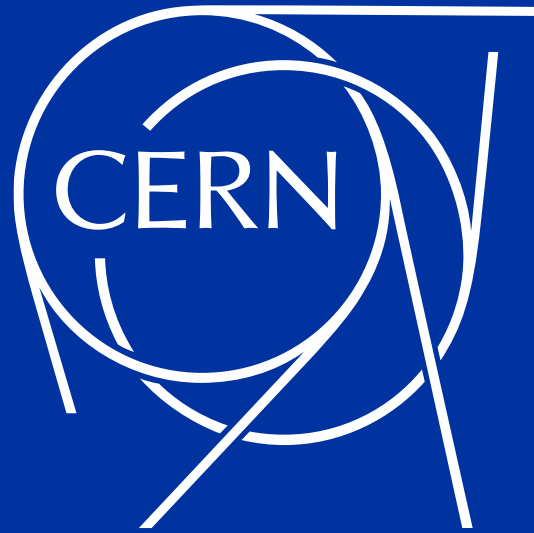
**17:00** Messages

**17:15** Presentation of Heisenberg Medal - Johannes Blümer for the Heisenberg Society

**17:30** A word from Herwig

**18:00** Drinks Reception

**Thank you for your attention!**



# Backup



# Quantum Technology Initiative



Starting of the activities for Phase 2 since January 2024

- ❑ Set up the governance (Program Committee is in place, Technical Expert Group and Advisory Board memberships are being discussed)
- ❑ Started procurement process for quantum hardware resource access (diversified set of technologies from both EU and US providers)
- ❑ Define detailed research plan
  - ❑ Personnel plans are approved across all departments involved
  - ❑ Detailed timeline for the prioritised objectives is being finalized
  - ❑ Plan for procuring additional funds to complement approved budget (two EC proposals submitted in March 2024)
  - ❑ Organisation of the QT4HEP conference in November 2024 has started (logistics, scientific committee, ..)

A full report on the results of the QTI 1 available in June 2024

# Open Quantum Institute

Pilot Phase OQI hosted at CERN for 3 years

- ❑ Official start March 1st, 2024
- ❑ Operational Launch Event on March 5th
  - ❑ ~200 people attended 4 workshops
  - ❑ +100 remote participants at public session
- ❑ Opened applications for membership
  - ❑ Friend / Member / Partner
- ❑ Setting up Governance
  - ❑ Advisory Board: call to MS to nominate a member if interested by March 31st
  - ❑ Scientific and Impact Committees: terms-of-reference and composition being finalised
- ❑ Next Actions
  - ❑ Preparing partnership agreement template
  - ❑ Preparing personnel recruitment
  - ❑ Preparing call for use cases in April

