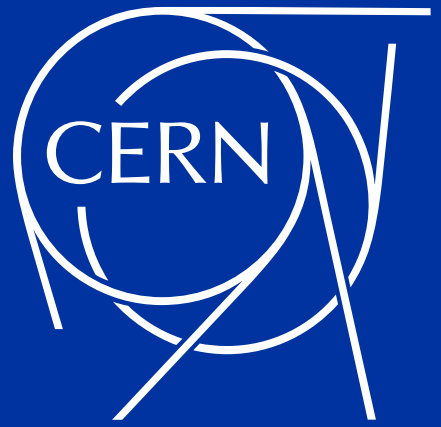


ULiège @ CERN

Introduction

J.-Ph. Tock EN-ACE GL

2024-12-05/06

- EN-ACE (05.12.204)
- Collaboration agreement (06.12.204)

- ❑ Master degree in Aerospace Electromechanical Engineering
- ❑ Ingénieur Civil en Gestion Industrielle

Université de Liège

- ❖ Ion beam figuring Facility Project Engineer
- ❖ XMM optical test facility (FOCAL X) system engineer
- ❖ XMM optical modules ground test director

EN-ACE

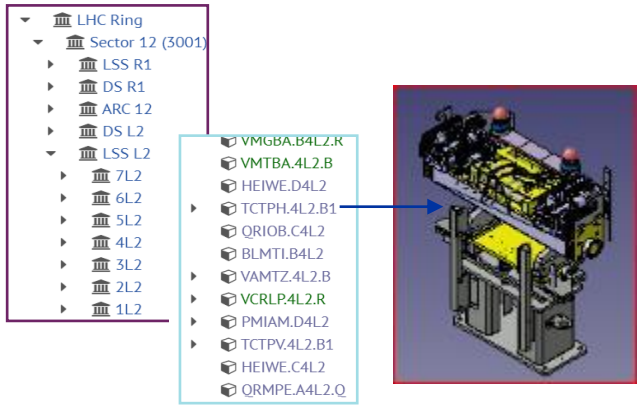
ACE : Accelerator Coordination & Engineering Group

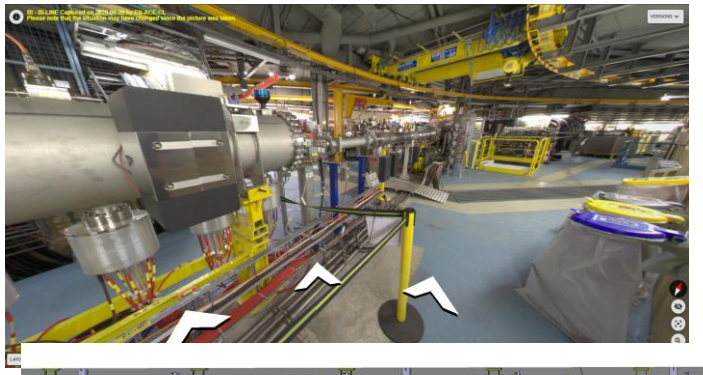
https://en.web.cern.ch/group/ace

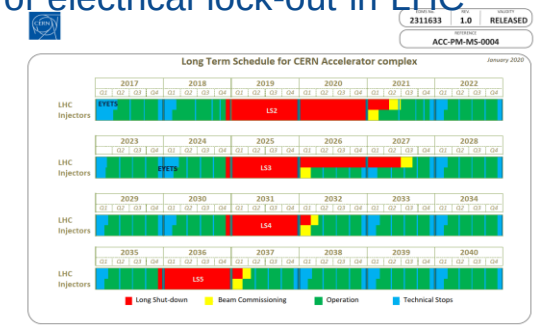
The group coordinates the activities for the interventions and changes to the LHC and its injectors. This includes configuration & layout management, integration studies and maintenance of the related 3D-CAD representations, organization and scheduling of programmed stops, management of the mid- and long-term schedule, worksites follow-up and management of the LHC sites, management of electrical lock-out in LHC and operational safety coordination.

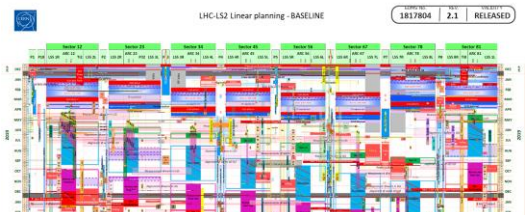
The group is responsible for the ATS Quality Service, giving support to the stakeholders of the ATS.

The group also provides support and/or advices in its key competencies.



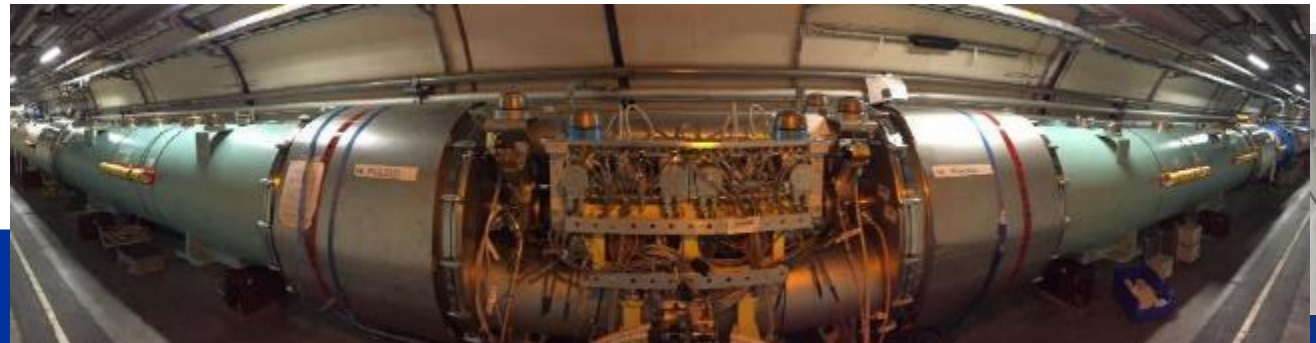






Group Leader
Jean-Philippe Tock

Accelertor Quality Service



Accelerators Coordination & Engineering Group (EN-ACE)

Mandate :

- ❑ **Coordinate the activities for the interventions and changes to the LHC and its injectors.**
- ❑ **Is responsible for the Accelerators & Technology Sector Quality Service.**
- ❑ **Provides support and/or advices in its key competences to projects and groups.**

EN-ACE-AQS
Accelerators Quality & Safety Support
PETIT Stephan

EN-ACE-CL
Configuration & Layouts
BARTOLOME JIMENEZ Sonia

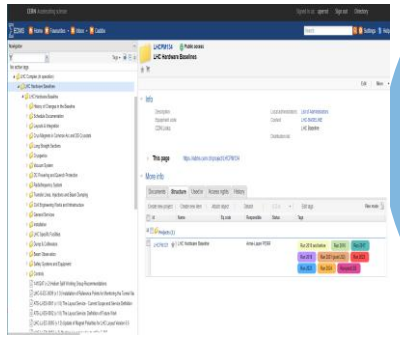
EN-ACE-COS
Coordination, Consignation & Support
GRILLOT Serge

EN-ACE-INT
Integration
COUPARD Julie

EN-ACE-OSA
Operational Safety Advisor
ETHERIDGE John

EN-ACE-OSS
Organisation, Scheduling & Support
BERNARDINI Marzia

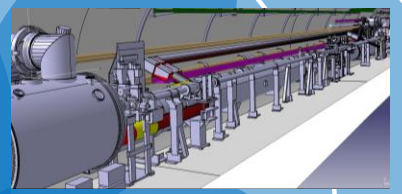
Electrical Safety Project

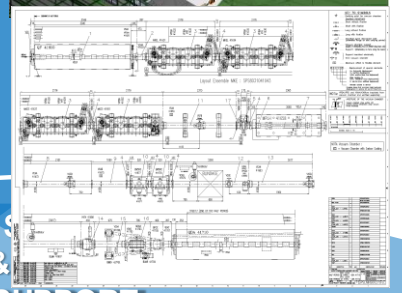


INTEGRATION

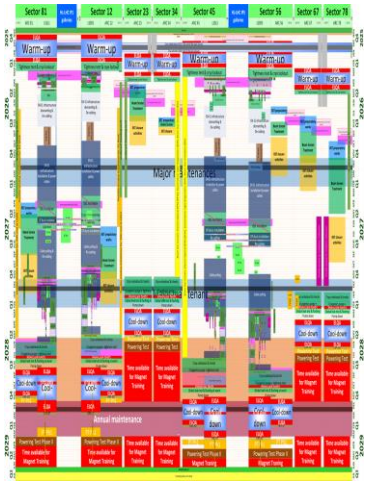
Electrical Lock-out

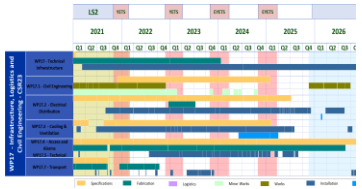
SAFETY ADVISOR





& SAFETY SUPPORT





Les opportunités

https://careers.cern/

PROFESSIONNEL.LE.S & JEUNES DIPLÔMÉ.E.S

STAFF MEMBERS

ORIGIN
Récemment diplômé.e.s

QUEST
Jeunes dîplômé.e.s avec une expérience

RESEARCH FELLOWS
Post-docs

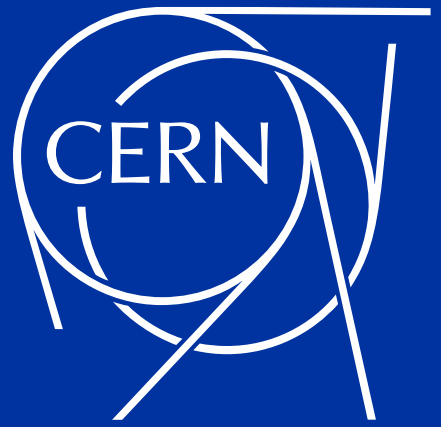
ÉTUDIANT.E.S

TECHNICAL & ADMINISTRATIVE STUDENTS

DOCTORAL STUDENTS

SUMMER STUDENTS

SHORT-TERM INTERNS



ULiège @ CERN

Introduction

J.-Ph. Tock EN-ACE GL

2024-12-05/06

- EN-ACE (05.12.204)
- Collaboration agreement (06.12.204)

Collaboration agreement : KN 5999/EN

FRAMEWORK COLLABORATION AGREEMENT
REFERENCE KN 5999/EN
(THE "AGREEMENT")

BETWEEN: THE EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH ("CERN"), an Intergovernmental Organization having its seat at Geneva, Switzerland, duly represented by Katy Foraz, Head of the Engineering Department,

AND: THE UNIVERSITY OF LIÈGE ("ULIÈGE"), a public higher-education and research institution of Wallonia having its seat at Liège, Belgium, duly represented by Anne-Sophie Nyssen, Rector of the University of Liège,

The European Organization for Nuclear Research (CERN)

DocuSigned by:
Katy Foraz
AC5CBFA8257B4C0...
Katy Foraz
Head of the Engineering Department

Signed on: 16.04.....2024

The University of Liège

DocuSigned by:
Anne-Sophie Nyssen
B38E4354C3044F6...
Anne-Sophie Nyssen
Rector of the University of Liège

Signed on: 15.05.....2024

Collaboration agreement : KN 5999/EN

This Agreement establishes the framework for collaboration between the Parties in particle physics and fundamental research and related areas, including engineering, machine learning applied to physics and experimental design, advanced mechanical systems / precision mechatronics, optical testing, numerical modelling of electromagnetic fields, sustainable geological engineering, vacuum and cryogenics, and in any other area of mutual interest. The implementation of this Agreement by the Parties shall be subject to the availability of resources at the Parties. The Parties shall use the results of their collaboration for non-military purposes only.

Each Party's contribution to a specific collaboration ("Project"), including, where applicable, the required resources, the duration of the activities and any deliverables, milestones, acceptance procedures and the management of the Project shall be set out in an Addendum to this Agreement. The Project shall be subject to the provisions of this Agreement, varied, where applicable, through the provisions of the Addendum.

Collaboration agreement : KN 5999/EN

Coordination

The Parties shall each nominate a technical co-ordinator, who together shall coordinate the overall execution of this Agreement, as well as a safety correspondent who will be responsible for safety matters. Their names and contact details are set out in Annex 1. It is understood that the Parties may decide to nominate a different technical co-ordinator for each specific Project, whose name and contact details shall be set out in the relevant Addendum.

ULiège Co-ordinator:
Frédéric Nguyen
Vice-Dean for Research
School of Engineering
University of Liège
Belgium

F.Nguyen@uliege.be

CERN Co-ordinator:
Jean-Philippe Tock
CERN-EN Department
CH-1211 Geneva 23
Switzerland

jean-philippe.tock@cern.ch

ACE seminar #29 - ULiège @ CERN (5-6 December 202

https://indico.cern.ch/event/1451248/

ACE seminar #29 - ULiège @ CERN

5 Dec 2024, 14:00 → 6 Dec 2024, 17:20 Europe/Zurich

30/7-018 - Kjell Johnsen Auditorium (CERN)

Thursday 5 December

14:00 → 14:30 **Welcome Building 55 and transfer to building 513** — 30m — B Entrance

14:30 → 15:15 **Introduction générale du CERN** — 45m — 513/R-068

Speaker: Stephan Petit (EN-ACE-AQS)

Gestion des eaux souterraines — 20m

Speakers: Frédéric Nguyen (ULiège), Serge Deleval (EN-CV-WMC)

15:15 → 15:30 **Transfer to: Building 193 by walking**

15:30 → 16:30 **Visit Antiproton Decelerator (AD)** — 1h — 193

16:30 → 16:40 **Transfer to: Building 300 with the shuttle**

16:40 → 17:20 **Visit Synchrocyclotron (SC)** — 40m — 300

17:20 → 17:30 **Transfer to: CCC with the shuttle**

17:30 → 18:15 **Visit CCC** — 45m — 874/R-018 - salle de réunion a...

Photomètre — 20m

Speakers: Jean-Christophe Gayde (BE-GM-ESA), Serge Habraken (ULiège)

ACE seminar #29 - ULiège @ CERN (5-6 December 202

https://indico.cern.ch/event/1451248/

FRIDAY 6 DECEMBER

ACE seminar #29 - ULiège @ CERN

5 Dec 2024, 14:00 → 6 Dec 2024, 17:20 Europe/Zurich

30/7-018 - Kjell Johnsen Auditorium (CERN)

09:30 → 09:40 **Introduction** — 10m — 30/7-018 - Kjell Johnsen Audit...

Speaker: Jean-Philippe Tock (EN-ACE)

09:40 → 10:10 **Présentation Université de Liège** — 30m

Speaker: Frédéric Nguyen (ULiège)

10:10 → 10:25 **CERN Seismic Network & LHC Operation experience** — 15m

Speaker: Michael Guinchard (EN-MME-EDM)

10:25 → 10:50 **Work covered by the Performance and Elecrical QA section of the TE-MPE group, focussing on FEM, transient behaviour of SC magnets, and quench protection (LTS and HTS)** — 25m

Speaker: Julien Dular (TE-MPE-PE)

10:50 → 11:15 **Numerical modeling of superconducting systems** — 25m

Speakers: Benoît Vanderheyden (ULiège), Christophe Geuzaine (ULiège)

11:15 → 11:40 **Presentation by Controls and Beam Studies for protection focusing on simulation for machine protection** — 25m

Speakers: Cedric Hernalsteens (TE-MPE-CB), Delphine Domange (TE-MPE-CB)

11:40 → 12:00 **Normal conducting magnet activities focusing on FCC-ee magnet design and development** — 20m

Speaker: Jeremie Bauche (TE-MSC-NCM)

12:00 → 13:45 **Lunch Break** — 1h 45m — 30/7-001

ACE seminar #29 - ULiège @ CERN (5-6 December 202

https://indico.cern.ch/event/1451248/

Friday 6 December

ACE seminar #29 - ULiège @ CERN

5 Dec 2024, 14:00 → 6 Dec 2024, 17:20 Europe/Zurich

30/7-018 - Kjell Johnsen Auditorium (CERN)

13:45 → 14:05 **Neural simulation-based inference for LHC analysis** 20m

Speaker: Gilles Louppe (ULiège)

14:05 → 14:35 **Activities from the Mechanical & Materials Engineering group** 30m

Presentation on Simulation 15m

Speaker: Federico Carra (EN-MME-EDS)

Presentation on work done for Einstein Telescope 15m

Speaker: Ana Teresa Perez Fontenla (EN-MME-MM)

14:35 → 15:05 **Cryogenic radiative cooling of a large mirror suspended from an inverted pendulum and active platform for gravitational wave detector** 30m

Speakers: Christophe Collette (ULiège), Lionel Jacques (ULiège)

15:05 → 15:25 **U-NET for minute-long unmodeled gravitational wave bursts** 20m

Speaker: Maxime Fays (ULiège)

15:30 → 15:45 **Coffee break** 15m 30/7-018 - Kjell Johnsen Audit...

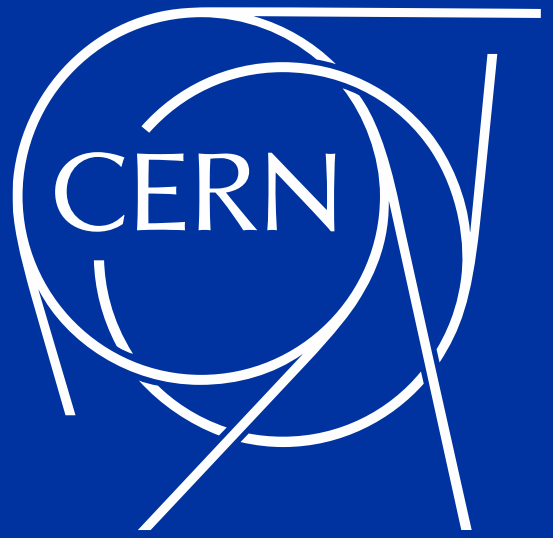
15:45 → 16:15 **FCC - Arc Cell Mock-up** 30m

Speaker: Melvyn Rouchouse (EN-ACE-INT)

16:15 → 16:45 **Scheduling Tools development for the next programmed stops** 30m

Speaker: Afonso Rebordao (EN-ACE-OSS)

Collaboration agreement : KN 5999/EN


CERN