




- **Collaborative efforts and associated Financial support**
- **New staging strategy –first 1-tour of a simplified PERLE by beginning 2028**
- **Macro Vision on the PLANNING (detailed plans available)**
 - **What is needed ? Call for contributions !**



Collaborative efforts and associated Financial support

- **iSAS**: European INFRA-TECH project 11 research partners (**CNRS, CERN, ESS, DESY, VUB, CEA, HZB, INFN, UKRI, UL, EPFL**). Financial support for the construction of the **full LINAC cryomodule** (with IN2P3 matching funds + CM vessel from ESS). 
- **DC-gun + photocathode+ preparation chamber** acquired by RI within a **Collaboration Agreement**. All material has been shipped to IJCLab end of January 2024. **Laser** has been also purchased and delivered.
- We have proposed a project (**ERL4ALL**) to **CNRS** which should allow to finance **the full injection line and a part of a first tour equipment**. Money required 3,6M€. Led by Maud Baylac , Walid Kaabi. We received a first green light and the project will be presented within 2months for final decision/approval.
- Discussions well advanced with **HZB** to recuperate part of the equipment of **BESSY VSR - Cryogenic plant, valve box and transfer lines**. Possibility to recuperate all materiel by Summer 2025.
- Discussion on going for receiving in-kind some material from **CBETA (quadrupoles essentially to equip the first tour of PERLE)**
- Increasing collaborations with
 - **CERN (R&D on 800MHz SRF Cavities (FCC))** : production and post-production processes. Discussion well advanced
 - **LASA-Milano** (cavities LINAC Cryomodule, booster, DC-gun/photocathode). Discussion started
 - **Jlab** (Hom/Absorbers/cavities). Discussion on going



ISAS: Innovate for Sustainable Accelerating Systems

- EU call HORIZON-INFRA-2023-TECH-01-01: **New technologies and solutions for reducing the environmental and climate footprint of RIs.** **5M€ total with important matching funds**
- **The objective of iSAS** is to innovate those technologies that have been identified as being a common core of SRF accelerating systems and that have the largest leverage for energy savings with a view to minimizing the intrinsic energy consumption in all phases of operation
- **Project lead by CNRS**
 - Scientific coordinator : J. D'Hondt (VUB)
 - Project coordinator : A. Stocchi
- **International consortium :**
 - 11 research partners (CNRS, CERN, ESS, DESY, VUB, CEA, HZB, INFN, UKRI, UL, EPFL)
 - 6 industrial partners

SEEN FROM PERLE VIEW POINT IT ALLOWS TO FINANCE (with in-kind and matching funds)

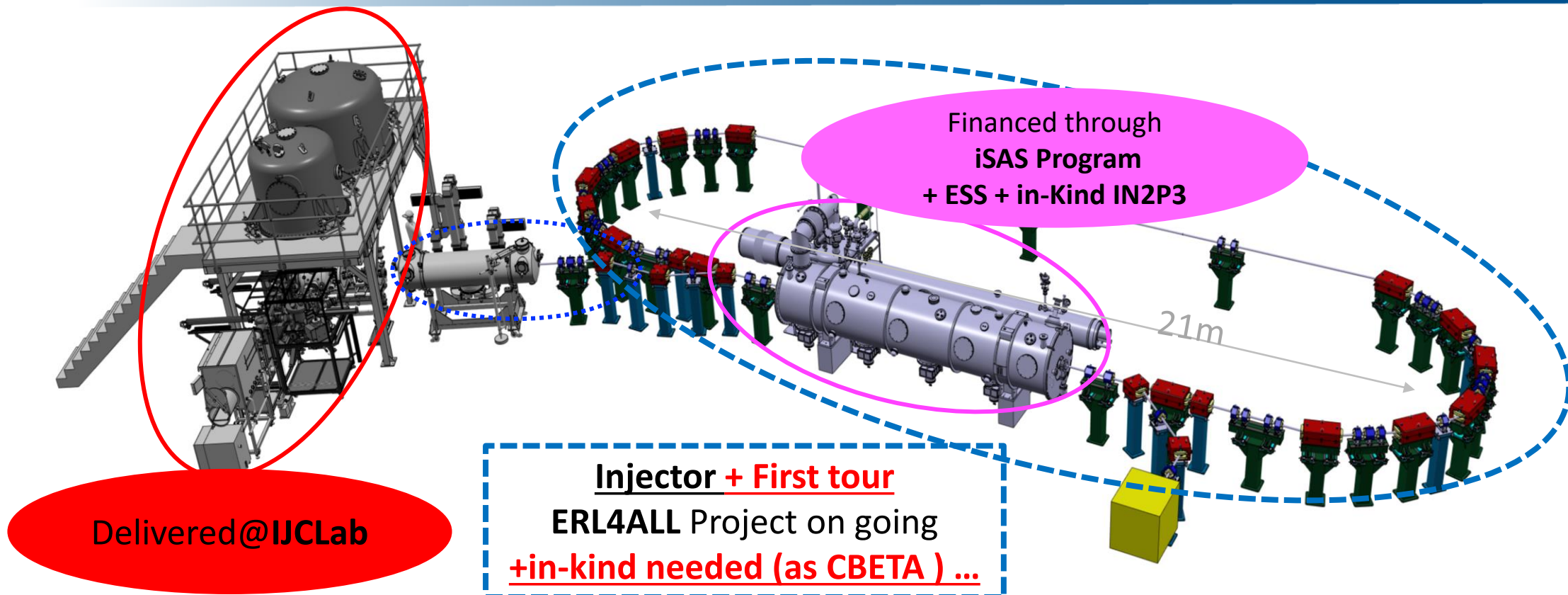
THE LINAC CRYOMODULE in Collaboration

with IJCLab, CERN, CEA, ESS, INFN-LASA

Money already available since March 1st 2024, bid for cavities in preparation



New staging strategy –first 1-tour of a simplified PERLE by beginning 2028



*Infrastructures and radioprotection
Financed by CPER funds*

Cryogenic Plants.
In-kind from HZB + **extra money requests**



Macro Vision on the PLANNING (detailed plans available)

Today

Site is now chosen : IGLOO !
(infrastructure studies started)

- Designs/ Studies
- Procurement / Construction / Installation
- Commissioning

DC-Gun/Laser/FC

Delivered@Orsay

Injector

Budget asked (decision in Spring)

LINAC

Cryomodule

Budget obtained

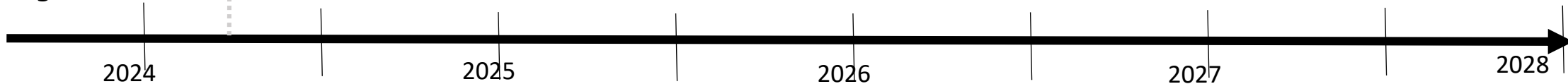
First Loop

*Budget partially asked (decision in Spring) **in-kind needed***

2nd 3rd Loop

Budget to be asked

If obtained within 2years. PERLE@250MeV could be completed in 2030





What is needed ? Call for contributions !

The budget situation is significantly improved in the last year,
but even in case we obtained ERL4ALL, to fully realise the PERLE 1-tour (as a first stage):
miss ~4M€ (less than 20% of total cost for 1-turn configuration)

We need your contributions
in-kind contributions from internal collaborators strongly strengthen our budget requests
These contributions could come also in-kind.

The missing items where important contributions could be decisive are :

- Dipole Magnets
- Cavities for boosters
- Cryogenic equipment (to complete the Bessy in-kind)
- Vacuum pumps
- Some diagnostics
- ...

Let's discuss,
but of course
we should have bilateral discussions