

**STRONG-2020**



**HORIZON 2020**

Annual Meeting 2024

**Hadron Physics in Horizon Europe**

Barbara Erazmus (CNRS, Subatech)

# Future Perspectives: Horizon Europe



- Research and innovation funding programme until 2027
- The programme is built around **three main pillars** – excellent science, global challenges and industrial competitiveness, and innovative Europe.
- More details can be found [here](#)

# Future Perspectives: Horizon Europe





# Future Perspectives: RIs in Horizon Europe



## INFRADEV

- Developing, consolidating and optimizing European RIs landscape, maintaining global leadership

## INFRASERV

- **RI services to support health research, accelerate the green and digital transformation, and advance frontier knowledge**

## INFRATECH

- Next generation of scientific instrumentation, tools and methods and advanced digital solutions

## INFRAEOSC

- Enabling an operational, open and FAIR EOSC (European Open Science Cloud) ecosystem

## INFRANET

- Network connectivity enabler for collaboration without boundaries



# Future Perspectives: RIs in Horizon Europe



## Research infrastructure services advancing frontier knowledge (INFRASERV)

- This topic aims at providing transnational access (on-site or remote) and/or virtual access to integrated and customised RI services for curiosity-driven research in wide scientific domains, offered by a wide range of complementary and interdisciplinary top level research infrastructures.
- This includes ad hoc users' training and scientific and technical support; data management,...
- **The scientific domains called under this topic are defined for each Work Programme**

**Work Programme 2025-2027: still under construction and scientific areas to be included will be known in summer 2024 (preliminary)**

*More details about the Research Infrastructures in Horizon Europe can be found [here](#)*



## Hadron Physics in Horizon Europe (topic proposition for future WP)



The research in the field of hadron physics addresses fundamental questions, such as the nature of confinement, the origin of exotic hadronic states and the properties of hot and dense nuclear matter. Those studies have a deep impact on the searches beyond the standard model, in astrophysics and strongly coupled systems as well as in particle and condensed matter physics.

The hadron physics community is leading, in the frame of the STRONG-2020 project (H2020-INFRAIA), a coherent effort of theoretical and experimental groups complemented with challenging high-technology developments in instrumentation and industrial applications.

The Consortium, involving 2000 scientists from 16 European countries, plans to build a new infrastructure initiative taking benefit from the Horizon Europe framework. We propose to extend the scope of the network, beyond the successful results already obtained, and to further federate leading hadron physics groups carrying out new challenging fundamental, instrumentation and applied research studies through accelerator collisions.

The objective is to support transnational access to major world-class European facilities: two ESFRI landmarks (FAIR and CERN), emerging infrastructures (MAMI and MESA from the excellence cluster in Germany) and LNF Frascati and ECT\* in Italy.

Virtual open-access to state-of-the-art computer codes will be provided for the high-precision studies of hadron physics.

# Hadron Physics in Horizon Europe

- **June 2023:** topic submitted to the EU Programme Committee (PC) by the French Ministry with strong support of IN2P3, CEA, NuPECC, Germany and Italy
- **19 October 2023:** discussion of orientations. Importance of the topic raised with the support of French, German and Italian representatives in the PC.
- **9 February 2024:** preparation of the Work Programme 2025-2027  
France, together with other countries, indicated **a high priority** supporting the topic "Hadron Physics" for the Work Programme 2025
- **Mai 2024:** draft of the Work Programme (WP) prepared by EU Commission
- **June 2024:** WP 2025 shared with Representatives of the Program Committee
- **June 2024:** Preliminary information on the Work Programme

*If the topic of Hadron Physics is included in the Work Program 2025-2027*

- *discussions with the EU*
- *preparation of a new project by the Steering Committee restructuring the STRONG-2020 Consortium*



## 2021-2022 Work Programme



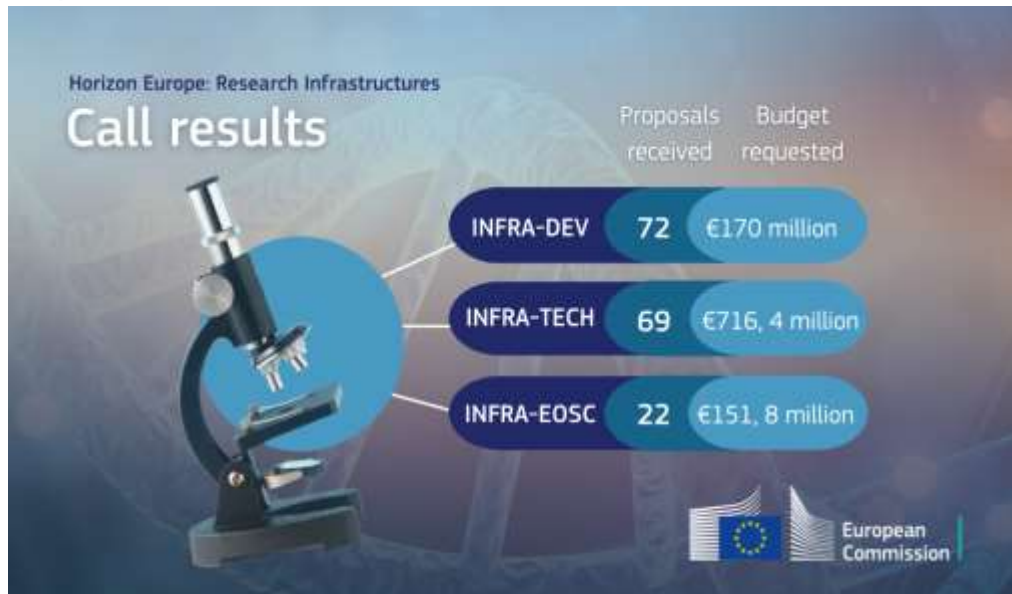
The 2022 Research Infrastructure calls for proposals received a total of **93 submitted applications** for all four destinations. After expert independent evaluations, **50 proposals were selected** for funding, of which:

- 26 projects signed their grant agreement following the **INFRADEV** call, with an indicative budget of €70.34 million.
- 7 projects signed their grant agreement following the **INFRAEOSC** call, with an indicative budget of €65.76 million.
- **13 projects signed their grant agreement** following the **INFRASERV** call, with an indicative budget of **€160.1 million**.
- 4 projects signed their grant agreement following the **INFRATECH** call, with an indicative budget of €19.9 million.

*Details can be found [here](#)*



# 2023-2024 Work Programme



**163 proposals received** under Horizon Europe: Research Infrastructures

- During the latest call for applications, 163 proposals were received, requesting a total research grant of €1,038 billion.
- **INFRADEV:** 72 proposals with a total requested budget of € 170 million. 9 projects are expected to be funded.
- **INFRAEOSC:** 22 proposals with a total requested budget of € 151.8 million. 9 projects are expected to be funded.
- **INFRATECH:** 69 proposals with a total requested budget of €716.4 million. 14 projects are expected to be funded.
- **INFRASERV:** no results are available yet

Details can be found [here](#) **STRONG-2020**



## RIs in Horizon Europe: some updates



- **20 March 2024:** publication of **Horizon Europe strategic plan 2025-2027 for R&I**. Important details and the document containing can be found [here](#).

In the Plan, Commission identifies three key strategic orientations for EU's research and innovation funding for the last three years of the programme (2025-2027):

- Green transition;
  - Digital transition;
  - A more resilient, competitive, inclusive and democratic Europe
- **17 April 2024:** the official description of **Work Programme** was published and can be downloaded [here](#). It includes the calls until the end of 2024.
  - **4-5 June 2024:** Conference **“Research Infrastructures in a Changing Global, Environmental and Socio-economical Context”** explored the value of RIs to open strategic autonomy, their contributions to key political objectives like the Green Deal and looked at the broad ecosystem, the relation with national/regional RIs and other initiatives and instruments.

Details and YouTube recording can be found [here](#).