



Institut national de
physique nucléaire et de
physique des particules

October 24th, 2023 - CNAO

Sébastien INCERTI

The background of the slide is a composite image. On the left, there is a dark space filled with numerous thin, colorful lines (orange, green, purple) that represent particle tracks or trajectories, some ending in small white dots. On the right, there is a vibrant, multi-colored nebula or galaxy structure with shades of orange, red, purple, and green. A semi-transparent orange rectangular box is overlaid on the left side of the image, containing the text 'Welcome message from IN2P3'.

Welcome message from IN2P3

Thank you to CNAO & to all participants !

IN2P3 / CNRS – CNAO : our ambition

Topics

- **Hadrontherapy : a scientific priority identified during the IN2P3 2020-2030 foresight exercise**
- **Signature of a CNAO – CNRS Collaboration agreement on June 2022 for 5 years**
 - Priority to [Carbon beams at clinical energies](#) & BNCT
 - Define official framework to shape science projects (see [topics](#)) between the two organizations
 - On CNRS side, any CNRS institute (10) can participate to research projects
 - **Coordination Committee** : Marco Pullia & Angelica Facoetti (CNAO); Marie Vanstalle & Denis Dauvergne (CNRS)
 - The agreement was supplemented by an amendment for a contribution to beam costs, signed on [July 2023](#)
 - Shared price : 400 euros/hour (CNRS teams) & 400 euros/hour (CNAO teams)
- **First two specific agreements established** (objectives / tasks / timetable / teams – 3 years)
 - « [BIOHADRON](#) » : Claire Rodriguez-Lafrasse (IP2I), Angelica Facoetti, et al. + IPHC + Subatech + LPC + ISTCT + IAB + US2B – signed on [September 2023](#)
 - « [PEPITES@CNAO](#) » Marc Verderi (LLR), M. Pullia, et al. – will be signed [soon](#)
- **A regular scientific animation** organized by the Coordination Committee
 - Annual workshop : 1) annual report on on-going projects, 2) brainstorming towards new projects, 3) other actions : opportunities for research support, calls, conferences, tutorials, Special Issues in journals, etc.
 - CNRS side : reporting to GDR « MI2B » annual general assembly
- **Support to CNAO-CNRS research projects**
 - IN2P3 in 2023 : PhD for « [BIOHADRON](#) », Post-doc for « [PEPITES](#) » @ CNAO – two new Master Projects will be created
 - CNRS in 2023 : CNRS-IRSN for « [BIOHADRON](#) » (budget + Post-doc), MITI (IN2P3/LLR & INP/LOA) for « [PEPITES@CNAO](#) »
 - IN2P3 teams are encouraged to pay beam time from their own resources; situation might be different for team from other CNRS institutes (e.g. IN2SI)
 - Highly encouraging CNAO + 2 CNRS teams (from different institutes, at least) to define new projects - **3 top-down tools** : « [PRIME](#) », « [PIB](#) », « [80PRIME](#) »

1. Beam monitoring & treatment control
2. Instrumentation & modelling for BNCT
3. Radiobiology (C, BNCT)
4. Radiolysis & benchmarking of codes (MC & bio)
5. Moving organs
6. Accelerator studies

Target of the day : identify a few new collaborative CNAO-CNRS projects involving (ideally) at least 2 CNRS institutes