

Project Highlights

- PIP-II technical design endorsed by external committee.
- ASPIRE Fellowship for engineering students underrepresented in STEM was launched.
- Nicolas Bazin appointed Technical Coordinator for CEA. Olivier Napoly joined Fermilab as a Guest Scientist.
- Workshops on Technical Requirements Specifications (TRS) and Maintainability and Operability in the PIP-II era were held.

Upcoming Events

12 Aug	Release of PIP-II Final Design Report
1-3 Sept	PIP-II Accelerator Physics Workshop
1 Sept - 1 Dec	ASPIRE Fellowship application period
16 Sept	Project Executive Board meeting

PIP-II Technical Design endorsed by external committee

The PIP-II Machine Advisory Committee (P2MAC), an international external committee, reviewed the PIP-II Final Design Report (FDR), endorsed the PIP-II technical design and concluded that "The technical design presented (in the FDR) provides a sound basis for construction."

ASPIRE Fellowship launched

The Accelerator Science Program to Increase Representation in Engineering, or ASPIRE, is a Fermilab Fellowship for undergraduate and graduate (masters) students who are underrepresented in STEM to develop the next generation of accelerator engineers. ASPIRE is a partnership between Fermilab and Midwest colleges and universities, initially with Northern Illinois University (NIU).

The ASPIRE Fellows participate in the design, development and construction of world-leading accelerator projects, initially PIP-II, and acquire skills that qualify them for full-time employment in accelerator and related fields, including at Fermilab.

ASPIRE aims to further diversify our PIP-II and Fermilab workforce and meet the hiring needs in accelerator engineering disciples.



ASPIRE Fellowship

Accelerator Engineering Fellowship for Underrepresented Minorities

ASPIRE

Program Details >

Maurice Ball is a mechanical engineer at Fermilab and the PIP-II Level 3 manager for building infrastructure. He is shown here in PIP2IT.

To learn more about ASPIRE, visit the Fellowship page and read the press release.

Nicolas Bazin has been appointed the next PIP-II technical coordinator (TC) for Commissariat à l'énergie atomique (CEA)-Saclay. The inaugural technical coordinator, Olivier Napoly, who retired from CEA at the end of June, joined Fermilab and the PIP-II project on August 2, 2021 as a guest scientist.

We thank Olivier for his outstanding service as the inaugural CEA TC and warmly welcome Nicolas to the project in his new role.



Olivier Napoly Fermilab Guest Scientist HB650 and LB650 cryomodules Office of the PIP-II Project Director



Nicolas Bazin PIP-II Technical Coordinator CEA-Saclay France

Workshops on Technical Requirements Specification (TRS) and on Maintainability and Operability in the PIP-II era

A series of Technical Requirements Specification (TRS) working meetings were held in July to advance the maturity of the documents and the PIP-II technical designs.

A Workshop on Maintainability and Operability in the PIP-II Era was held in July. Given that large-scale SRF linacs stay cold (no thermocycling) indefinitely, the goals of the workshop were:

- Understand the projected beam availability of the Accelerator Complex (AC) in the PIP-II era: what drives the duration of yearly planned AC shutdowns and can the duration be shortened
- Define the operational expectations for PIP-II, especially with regard to cryoplant and cryomodules during scheduled AC shutdowns. Assess if the design of PIP-II systems is compatible with operational requirements.
- Identify interfaces between the AC, lab infrastructure and PIP-II, expectations for maintenance and
 operation, and redundancies in systems to maintain operability.

Key takeaways are that most PIP-II systems are compatible with the operational requirements of SRF linacs or can be brought up to the required level. Several systems require additional analysis and review of requirements, such as cryoplant maintenance and PIP-II requirements for electrical infrastructure.



Accelerator campus / PIP-II Power Delivery System

In July, PIP-II welcomed several new employees, including a GEM Fellow, and a Northern Illinois University (NIU) engineering student.



Karie Badgley, Associate Scientist Booster Injection Magnets, Accelerator Upgrades



Jerrel Grays, Engineering Student PIP2IT Documentation, Linac Installation



Olivier Napoly, Guest Scientist HB650 and LB650 cryomodules, Office of the Project Director



HyeKyoung Park, Engineer 650 MHz Cavity, SRF Systems



Tiffany Price, Engineer Support Systems, Technical Integration



Brian Vaughn, Engineer High Power RF Distribution, Accelerator Systems

Not pictured: Japheth (Jay) Hayman, GEM Fellow, High Power RF, Accelerator Systems