TIC meeting

September 23

FNAL testbeams in 2025

Distributed by Kondo (thank you!)

From: Evan D. Niner <edniner@fnal.gov>
Sent: Friday, September 20, 2024 2:18 PM
To: Kondo Gnanvo <kagnanvo@jlab.org>; Chris.Madrid@ttu.edu; Corrado Gatto <gatto@fnal.gov>; Kiselev, Alexander <ayk@bnl.gov>; miguela@ucr.edu; Zhenyu Ye <yezhenyu@lbl.gov>; Murtaza Safdari <murtazas@fnal.gov>; Morand, Peter O. <pmorand@exeter.edu>; christina.wenlu.wang@cern.ch; Irene Dutta <idutta@fnal.gov>; cherry@lsu.edu; James H. Buckley <buckley@wuphys.wustl.edu>; Mauro Dinardo <Mauro.Dinardo@cern.ch>; Sudeshna Ganguly <sganguly@fnal.gov>; Junjie Zhu <junjie@umich.edu>; Grace E. Cummings <gcumming@fnal.gov>; Manoj Bhanudas Jadhav <mjadhav@anl.gov>; Megan E. Juszkiewicz <mconnors@gsu.edu>; Koji Nakamura <Koji.Nakamura@cern.ch>; Corrinne Elaine Mills <cmills10@uic.edu>; Wooyoung Jang <wyjang.physics@gmail.com>; Yasar Onel <yasar-onel@uiowa.edu>; theim@lbl.gov; Vladimir P Nagaslaev <vnagasl@fnal.gov>; Armstrong, Whitney R. <warmstrong@anl.gov>; Jonathan Paley <jpaley@fnal.gov>; Laura Fields <lfields2@nd.edu>; Marco Del Tutto <mdeltutt@fnal.gov>
Cc: Mandy Kathleen Rominsky <rominsky@fnal.gov>; Nathaniel J. Pastika <pastika@fnal.gov>; Eugene E Schmidt Jr <jj@fnal.gov>
Subject: [EXTERNAL] FTBF scheduling update

Hello all,

Thank you all for submitting requests for the upcoming FTBF run. I'm writing to provide an update on the scheduling process. The accelerator complex is facing two technical challenges that will affect the upcoming beam year. At this time we expect beam startup to be delayed from November and the run to be shortened but do not know how much. We have not started building a schedule until more information is clear.

In early August there was a fire at the Kautz Road substation, badly damaging one of the 4 transformers that are used to power the Main Injector. Since that time, the Infrastructure Services (ISD) and Accelerator (AD) divisions have been hard at work to understand the condition of the lab's remaining transformers and what the impact would be on the accelerator complex. The latest news is that ISD believes that 4 transforms can be used (2 at the Master substation and 2 at the Kautz Rd substation), and calculations suggest that with those 4 transformers they can power the whole accelerator complex, including the Main Injector and Switchyard. There is additional work to put the complex in this configuration and the current projection is to start running beam in the Booster in early November with MI and Switchyard to follow at an unknown scale. It is likely to take longer to commission the beam lines in this configuration and tune up to deliver stable, quality beam. The complex has not run in this configuration before and in dealing with this issue some summer shutdown work was deferred until next year, increasing the possibility of failures. If the complex can run in this configuration, it will be possible to receive the standard switchyard slow spill.

The second issues is that the set of MI heat exchangers that supply cooling to the LCW systems are now severely corroded. They are inspected and cleaned every other year but not measured for the thickness of the walls. The heat exchangers are pressure vessels, and the wall thickness just recently were found to be less than what is required for the rated pressure. The heat exchangers cannot operate without repair/replacement or change in the process/documentation and the pressure rating of the exchangers. A vendor will be investigating next week to determine what path forward is possible and the timescale.

I will continue to provide updates as we know more about the situations. I am happy to discuss further with anyone who has questions. I've sent this out to the emails associated with schedule requests, please distribute among your teams. At this time we do recommend exploring beam time at other locations as the beam time at FTBF will be reduced. When we know more about the length of the run we will work with everyone on optimizing and prioritizing the available beam time.

Thanks,
Evan, Mandy, Joe, JJ

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preTDR draft, Version0

The deadline is approaching !

Deadline: **September 29**:

Please, respect the deadline.

Thank you for your cooperation.

The short-term next steps:

- On September 30 Version0 will be frozen and made available to the collaboration via ZENODO.
  - Everyone in the collaboration is invited to submit comments and recommendations.
  - On top of this, the **internal reviewers** will scrutinize with particular care the sections assigned to them.
  - Reviewer's input and input from the whole collaboration **by October 20**.
  - A **google form** will be made available to submit inputs.

TIC meeting - ZDC

Monday 23 Sept 2024, 09:00 → 11:00 US/Eastern

Silvia Dalla Torre (INFN, Trieste)

Description Technical and Integration Council Meeting

Join Zoom Meeting

https://cern.zoom.us/j/9374314394?pwd=YTFjZjFGcXptMG13cGFQYWFQOWdrZz09

Recording:

09:00 → 09:05 **Communications** 5m

Speaker: Silvia Dalla Torre (INFN, Trieste)

09:15 → 09:35 **DSC communications** 20m

Speakers: Alexander Jentsch (Brookhaven National Laboratory), Alexander Kiselev (BNL), Brian Page (Brookhaven National Laboratory), Carlos Munoz Camacho (IJCLab, CNRS/IN2P3), Ernst Sichtermann (Lawrence Berkeley National Laboratory), Friederike Bock (ORNL), Grzegorz Kalicy (CUA), Hwidong Yoo (Yonsei University), Jaroslav Adam, Kondo Gnanvo (Jefferson Lab), Krzysztof Piotrzkowski (AGH UST), Laura Gonella (University of Birmingham), Dr Leszek Kosarzewski (Ohio State University), Marco Contalbrigo (INFN Ferrara), Maria Zurek (Argonne National Laboratory), Megan Connors (Georgia State University), Miguel Arratia (University of California, Riverside), Nicholas Zachariou (University of York), Oleg Tsai, Satoshi Yano (Hiroshima University), Dr Simon Gardner (University of Glasgow), Stefan Bathe (Baruch College, CUNY, & RBRC), Sylvester Joosten (Argonne National Laboratory), Tanja Horn (Cath), Zhangbu Xu (Kent State University)

09:40 → 10:00 **ZDC, physics cases and related requirements** 20m

Speaker: Alexander Jentsch (Brookhaven National Laboratory)

10:05 → 10:35 **ZDC, layout and simulation results** 30m

Speaker: Miguel Arratia (University of California, Riverside)

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Proposed ZDC layout and studies to illustrate its performance versus the requirement for Physics