

# COMMUNICATIONS

## TC-Office

TIC meeting, June 29<sup>th</sup> 2026

# BACKGROUND CHALLENGES

**GOALS (reminder): Answering to 3 families of questions:**

a) Impact on detector performance;

**b) Impact on data flow, requested bandwidth and potential dead-time;**

c) radiation/fluence damages.

Using data from simulation campaigns

Using radiation maps with DIS + background

**First Priority!**

The table uploaded in the INDICO agenda of the previous TIC meeting (June 22<sup>nd</sup>) is a summary of the status of the background studies:

- The summary is in the form of table instead of written text for easier readability
- DSCs are requested to send comments/corrections (deadline today)
- This table will be updated by me when further information is received and DSCs will only be asked to send comments/corrections, when needed

*Direct link to the table:*

[https://indico.bnl.gov/event/33334/attachments/70962/121603/Background\\_Challenges\\_DSCs.xlsx](https://indico.bnl.gov/event/33334/attachments/70962/121603/Background_Challenges_DSCs.xlsx)

# BACKGROUND CHALLENGES, missing inputs

From the summary table, these are the inputs that the DSC need for there studies and which are lacking:

- Full ITR2 implementation in EICrecon for performance studies of pfRICH and dRICH
  - Ongoing: coworking: S&C, DSCs
- Implementation of hpDIRC reconstruction
  - Reconstruction software under development, DSC
- Proper AC-LGAD digitization (requested by FF detectors)
- Timepix4 digitization (for low- $Q^2$  taggers)
- Simulated files to enhance the background role ( $e/\pi$  separation studies in EEEMCAL)
- Simulation files with larger statistics (requested by BHCAL)
- SR simulation in the FB detector region
- Implementation of the updated B0 geometry in DD4HEP
- Updated geometry/design of magnets, shielding, collimator (requested by FB detectors)

# DATA FLOW RATES AND OCCUPANCY

The table to collect data about rates/occupancy prepared by Jeff Landgraf is available at LINK to the table:

<https://brookhavenlab.sharepoint.com/:x:/s/EICPublicSharingDocs/IQB-kLhwyLvuSpfzxCNyxGDOAZRAjAheMUOrajAzU52MJ1s?e=Hhc0ig>

**DSLs and DSTCs, are kindly asked to populate the table !**

For instructions: Jeff's talk at TIC On May 18th, link:

[https://indico.bnl.gov/event/32710/contributions/124687/attachments/70213/120369/260518\\_TIC.pptx](https://indico.bnl.gov/event/32710/contributions/124687/attachments/70213/120369/260518_TIC.pptx)

- So far: only FF detectors and SVT entered their data
- Jeff is interacting with DSCs to progress; TC-Office ready to contribute to the effort

# TIC meeting - SiPM QC at Yale; Background simulation setup; Background challenges: hpDIRC



Monday 29 Jun 2026, 08:50 → 11:35 US/Eastern

Silvia Dalla Torre (INFN, Trieste)

**Description** Technical and Integration Council Meeting

Join Zoom Meeting

<https://cern.zoom.us/j/9374314394?pwd=YTFjZjFGcXptMG13cGFQYWwFQWdrZz09>

Recording:

09:00

→ 09:05

**Communications**

5m



**Speakers:** John Haggerty (Brookhaven National Laboratory), Oskar Hartbrich (Oak Ridge National Lab), Prakhar Garg (Yale University), Silvia Dalla Torre (INFN, Trieste)

09:15

→ 09:30

**DSC communications**

15m



**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 Piotrkowski (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)

09:30

→ 09:50

**LFHCALSiPM QC at Yale**

20m



09:55

→ 10:15

**Overview of the background simulation setup**

20m



**Speaker:** Dr Simon Gardner (University of Glasgow)

10:20

→ 10:35

**Background challenges: hpDIRC - POSTPONED, now on July 6th**

15m



**Speaker:** Grzegorz Kalicy (CUA)

# TIC on July 6<sup>th</sup>

## TIC meeting - Update on mechanics and integration; Cooling requirements ; FLHCAL background (TBC); Background challenges: hpDIRC

Monday 6 Jul 2026, 08:50 → 11:35 US/Eastern

Silvia Dalla Torre (INFN, Trieste)

**Description** Technical and Integration Council Meeting

Join Zoom Meeting

<https://cern.zoom.us/j/9374314394?pwd=YTFjZjFGcXptMG13cGFQYWwFQOWdrZz09>

Recording:

**09:00** → 09:05 **Communications**

⌚ 5m

**Speakers:** John Haggerty (Brookhaven National Laboratory), Oskar Hartbrich (Oak Ridge National Lab), Prakhar Garg (Yale University), Silvia Dalla Torre (INFN, Trieste)

**09:15** → 09:30 **DSC communications**

⌚ 15m

**Speakers:** Alexander Jentsch (Brookhaven National Laboratory), Alexander Kiselev (BNL), Brian Page (Brookhaven National Laboratory), Carlos Munoz Camacho (JCLab, 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 Piotrkowski (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, & RBR), Sylvester Joosten (Argonne National Laboratory), Tanja Horn (Cath), Zhangbu Xu (Kent State University)

**09:30** → 09:50 **Mechanics and integration, monthly update**

⌚ 20m

**Speaker:** Roland Wimmer

**09:55** → 10:15 **Cooling requirements**

⌚ 20m

**Speaker:** Dr E. C. Aschenauer (BNL)

**10:20** → 10:35 **Background challenges: FLHCAL (TBC)**

⌚ 15m

**Speakers:** Friederike Bock (ORNL), Oskar Hartbrich (Oak Ridge National Lab)

**10:40** → 10:55 **Background challenges: hpDIRC**

⌚ 15m

**Speaker:** Grzegorz Kalicy (CUA)