

Progress Report

RIKEN/RBRC

Itaru Nakagawa

sPHENIX Collaboration Meeting

<https://indico.bnl.gov/event/12086/>

This Thursday and Friday

11th sPHENIX Collaboration Meeting

Jun 17, 2021, 9:00 AM → Jun 18, 2021, 11:59 PM US/Eastern

Description David Morrison is inviting you to a scheduled ZoomGov meeting.

Topic: sPHENIX Collaboration Meeting
Time: Jan 21, 2021 09:00 AM Eastern Time (US and Canada)
Every day, 2 occurrence(s)
Jan 21, 2021 09:00 AM
Jan 22, 2021 09:00 AM

Please download and import the following iCalendar (.ics) files to your calendar system.
Daily: https://bnl.zoomgov.com/meeting/vJltdUGrjIoGIB5edRg4Gzk7zL_AzyhQA-Q/ics?icsToken=98tyKulurjoEtScshvBel89EpnKeenrq35pg4ElmRvXBHR0eAihLM5jKXt3lfdm

Join ZoomGov Meeting
<https://bnl.zoomgov.com/j/1601880922?pwd=ajllbXZUcVRVcTltdjNRbUFUeGNBZz09>

Meeting ID: 160 188 0922
Passcode: 539738
One tap mobile
+16692545252_1601880922#_*539738# US (San Jose)
+16468287666_1601880922#_*539738# US (New York)

Dial by your location
+1 669 254 5252 US (San Jose)
+1 646 828 7666 US (New York)
+1 551 285 1373 US
+1 669 216 1590 US (San Jose)

Meeting ID: 160 188 0922
Passcode: 539738
Find your local number: <https://bnl.zoomgov.com/u/adXYWjZ5Ao>

Join by SIP
1601880922@sip.zoomgov.com

Join by H.323
161.199.138.10 (US West)
161.199.136.10 (US East)

Time	Topic	Speaker	Duration
9:00 AM → 9:35 AM	Collaboration news	Speakers: David Morrison (BNL), Gunther Roland (MIT)	35m
9:35 AM → 9:55 AM	Speaker's bureau report	Speaker: Marzia Rosati (Iowa State University)	20m
9:55 AM → 10:15 AM	Inclusion, equity and diversity committee report	Speaker: Senta Greene (Vanderbilt University)	20m
10:15 AM → 10:25 AM	Coffee break		10m
10:25 AM → 11:00 AM	Project news	Speaker: Edward O'Brien (BNL)	35m
11:00 AM → 11:25 AM	MVTX status and plans	Speaker: Dr Yasser Corrales Morales (LANL)	25m
11:25 AM → 11:50 AM	INTT status and plans	Speaker: Dr Genki NUKAZUKA (RIKEN BNL Research Center)	25m
11:50 AM → 12:15 PM	TPC status and plans	Speaker: Henry Klest (Stony Brook University)	25m
12:15 PM → 1:15 PM	Lunch break		1h
1:15 PM → 1:40 PM	oHCAL status and plans	Speaker: Dr Veronica Canoa Roman (Stony Brook University)	25m
1:40 PM → 2:05 PM	IHCAL status and plans	Speaker: John Lajole (Iowa State University)	25m
2:05 PM → 2:30 PM	EMCAL status and plans	Speaker: Sean Stoll (BNL Physics)	25m

Zoom link: <https://bnl.zoomgov.com/j/1601880922?pwd=ajllbXZUcVRVcTltdjNRbUFUeGNBZz09>

Access to sPHENIX indico page

Hello,

If you receive this message, it means that the email address you provided Dave and Gunther to allow access to Indico didn't work when I tried to import it.

You can tell whether you have access by another email address by looking at:

<https://indico.bnl.gov/category/65/>

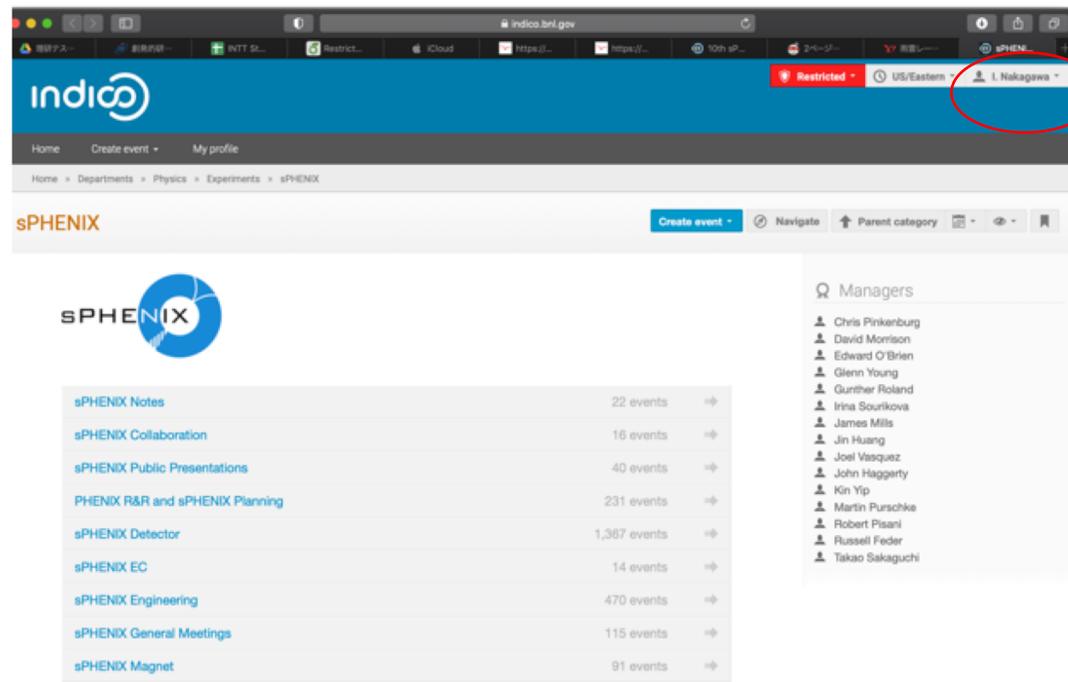
If you do, you'll be able to access (i.e., read) a plethora of sphenix agenda pages; if not, it will say "Access Denied" or something along those lines.

For this to work, you have to provide the email address registered in Indico, and you have to log into the Indico site. Try logging into to Indico to find your username; you can ask for a new password if you've lost it.

To update your whitelisted email address, it would be easier for me if the survey could be updated, but if you really really really need access right now, you can email me and hope it doesn't get lost in the blizzard of email I get.

John Haggerty
haggerty@bnl.gov
cell: 631 741 3358

Your BNL indico account has to be listed in sPHENIX collaboration list



The screenshot shows the Indico website interface. The top navigation bar includes the Indico logo, a "Restricted" status indicator, and the user profile "I. Nakagawa". The main content area displays the sPHENIX logo and a list of collaboration categories with their respective event counts. A "Managers" list is visible on the right side of the page.

Category	Events
sPHENIX Notes	22 events
sPHENIX Collaboration	16 events
sPHENIX Public Presentations	40 events
PHENIX R&R and sPHENIX Planning	231 events
sPHENIX Detector	1,367 events
sPHENIX EC	14 events
sPHENIX Engineering	470 events
sPHENIX General Meetings	115 events
sPHENIX Magnet	91 events

Managers

- Chris Pinkenburg
- David Morrison
- Edward O'Brien
- Glenn Young
- Gunther Roland
- Irina Sourikova
- James Mills
- Jin Huang
- Joel Vasquez
- John Haggerty
- Kin Yip
- Martin Purschke
- Robert Pisani
- Russell Feder
- Takao Sakaguchi

BNL Dark Box

- Delivered on June 11th.
- Exporting paper work has been completed.
- Contract with the shipping company is in progress.
- Pickup date for the export to BNL is scheduled on 21st, June.



Ready for shipping



Stave

- DP460 glue was delivered to Asuka on June 16th.
- They will give another glue test on one of the yielded staves from batch-2.
- Follow exact procedure as Rob suggested this time.
- See if 0.8Nm can be achieved.
- Since they are confident in mixing glue procedure with minimum contamination of bubbles, I didn't force them to use a centrifuge.
- Even they are successful in 0.8Nm torque test this time, yield rate won't be known until they do mass production in batch-3. This is my concern.

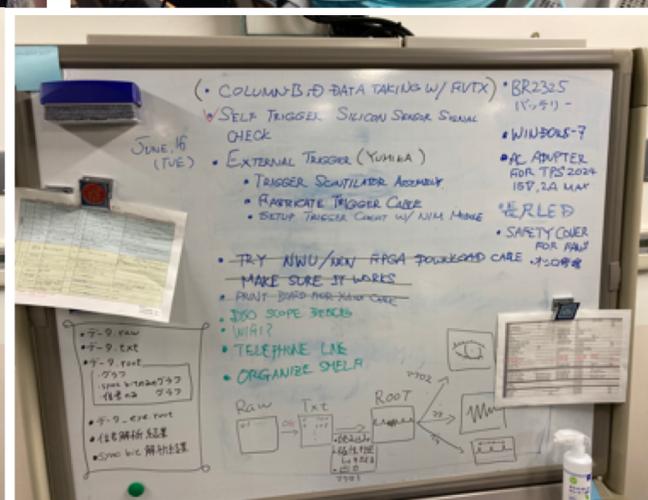
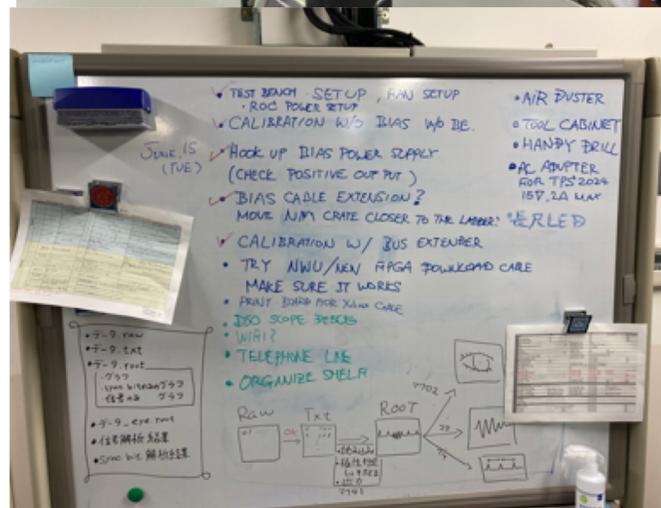
1008 ROC Board Test@RIKEN Preparation

June 8 ~ 10th



Thanks to Rachid/Milan for FEM-IB/FEM/BCLK board shipping to NWU.
We've tested the most of the RIKEN test bench gears were tested in NWU.

Test bench setup in RIKEN



RIKEN test bench is now up on running



Special thanks to Luna, Yumika, μ , Genta, Yusuke, Genki

Next step : External trigger

ROC-9 Regulator Tests in NWU

- As far as we have been operating in 3.0V condition for the last 2 months, we haven't observed any new issues.

	Column-A	Column-C	Voltage chip-26
Digital	3.3V	3.0V	2.649V
Analogue	3.0V	2.8V	2.576V

@LVDS=8mA

- The half entry issue hasn't been resolved yet, we don't have any evidence that higher output voltage regulator will help to improve.
- Thus I make action based on Digital:3.0V and Analogue:2.8V regulators.

1008 ROC Test Preparation

of INTT-ROCs = 18

of Digital/Analogue Regulators per ROC=12

	Regulator Model	# of Regulators	To be Purchased
Digital	MCP1726-3002E/MF	216	350
Analogue	MCP1700T-2802E/TT	216	350

- Towards contract
 1. Regulator replacement and DF18 repair work for ROC-7 (lead time 2~3 weeks)
 2. Regulator replacement for 1008 ROCs (lead time 4 weeks?)

Regulators to be replaced

Analogue: MCP1700T-2802E/TT



MCP1700

Low Quiescent Current LDO

Features:

- 1.6 μ A Typical Quiescent Current
- Input Operating Voltage Range: 2.3V to 6.0V

General Description:

The MCP1700 is a family of CMOS low dropout (LDO) voltage regulators that can deliver up to 250 mA of

Digital: MCP1726-3002E/MF



MCP1726

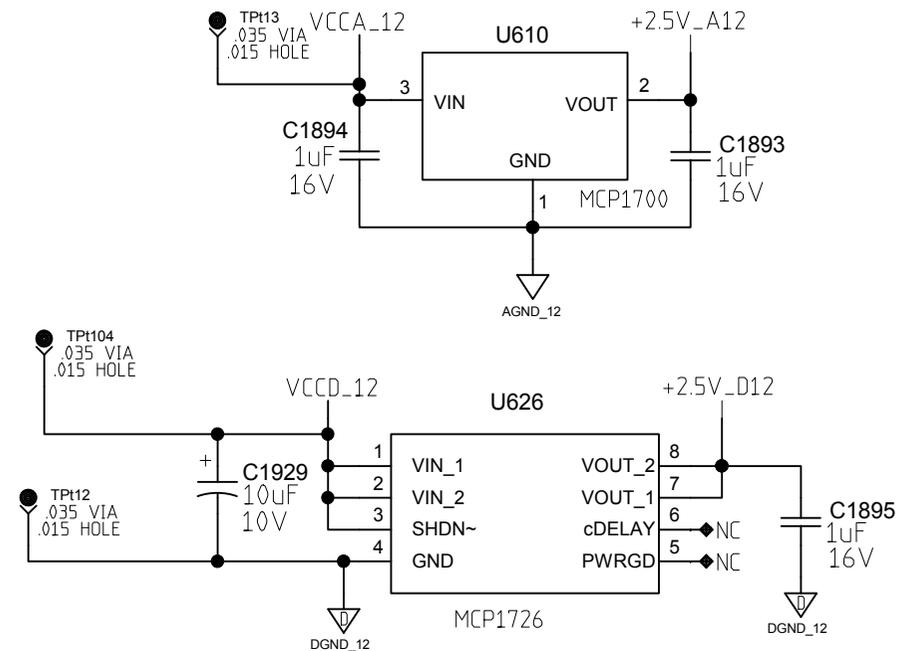
1A, Low-Voltage, Low Quiescent Current LDO Regulator

Features:

- 1A Output Current Capability
- Input Operating Voltage Range: 2.3V to 6.0V

Description:

The MCP1726 is a 1A Low Dropout (LDO) linear regulator that provides high current and low output



RIKEN Test Bench Plan

- Establish 1008-ROC testing procedure
- Run calibration for every single port.
- Column B,D?
 - Use FVTX ladder
 - Fabricate a few straight conversion cable for column B,D without waiting for Dan's final design? (costly solution)
- Database development