

Detector-1 WG Conveners Meeting

Silvia, Or, Tanja, John, Bernd

Meeting Agenda

10:30 AM → 10:55 AM	Introduction & SC Update Speakers: Bernd Surrow (Temple University), John Lajoie (Iowa State University), Or Hen (MIT), Silvia Dalla Torre (INFN, Trieste), Tanja Horn (Cath)	🕒 25m	
10:55 AM → 12:20 PM	WG Conveners		
10:55 AM	Far-Backward & Exclusive: Requirements for Low-Q2 tagger Speakers: Axel Schmidt (George Washington University), Daria Sokhan (CEA Saclay), Igor Korover (MIT), Jaroslav Adam (BNL), Krzysztof Piotrkowski (AGH UST), Nicholas Zachariou (University of York), Rachel Montgomery, Spencer Klein (LBNL)	🕒 45m	
11:40 AM	Inclusive Speakers: Barak Schmookler (UC Riverside), Claire Gwenlan (Oxford), Paul Newman (University of Birmingham, UK), Tyler Kutz (MIT)	🕒 20m	
12:00 PM	SimQA Speakers: Joe Osborn (Oak Ridge National Laboratory), Wenliang Li (Stony Brook University CFNS), Wouter Deconinck (University of Manitoba), Zhoudunming Tu (BNL)	🕒 20m	
12:20 PM → 12:30 PM	Q&A		

- Reminder: collaboration membership and name selection
- Detector-1 collaboration formation meeting
- Institutional survey analysis
- Design maturity: introduction of physics performance matrices

Collaboration Membership & Naming

- Institutional survey resulted with ~150 institutions.
- Individual membership sign up link circulated (<https://forms.gle/QNNEkkKWxmUtW6x76>).
~470 members signed up to be members of Detector-1 at of now.
- All members offered to suggest collaboration names and then vote on it.
First voting round will close today.
Final round among top 3 – 4 names will start on Monday.
Please contact / direct people to John for ANY problem with the voting process.
- Collaboration name to be announced on July 26th at the collaboration formation meeting.

Collaboration Formation Meeting

- July 26, 27 at Stony Brook, in conjunction with the EICUG summer meeting.
<https://indico.bnl.gov/event/15342/>
- 168 registered participants. Assume $\sim 1/2$ in person (i.e. ~ 84).
- Agenda focus on WG presentations & discussion and Institutional list meeting.

July 26th

EICUG
Meeting
Opening

09:00	Welcome, Agenda, and Meeting Organization details	Abhay Deshpande et al.
	Wang Center, CFNS Stony Brook University	08:30 - 08:45
	Update from the Project	Jim Yeck
09:00	Wang Center, CFNS Stony Brook University	08:45 - 09:10
	Status of Detector I	Silvia Dalla Torre
	Wang Center, CFNS Stony Brook University	09:15 - 09:30
10:00	Status of Accelerator design	Todd Satogata
	Wang Center, CFNS Stony Brook University	09:35 - 10:00
	DOE Update	Timothy Hallman
10:00	Wang Center, CFNS Stony Brook University	10:10 - 10:30

Detector-1
Meeting
Opening

11:00	Coffee Break	
	Wang Center, CFNS Stony Brook University	10:35 - 11:00
	Detector and Collaboration Process	Or Hen
11:00	Wang Center, CFNS Stony Brook University	11:00 - 11:15
	Institutional Survey & Analysis	Bernd Surrow
	Wang Center, CFNS Stony Brook University	11:20 - 11:35
12:00	Geometry, Consortia, and Detector-1 Integration	Tanja Horn
	Wang Center, CFNS Stony Brook University	11:40 - 11:55
	Collaboration Name	John Lajoie
12:00	Wang Center, CFNS Stony Brook University	12:00 - 12:15
	Q&A	
	Wang Center, CFNS Stony Brook University	12:15 - 12:30

Detector-1
DWG
Presentations

13:00	Lunch	
	Wang Center, CFNS Stony Brook University	12:30 - 14:00
	Computing & Software WG	
14:00	Wang Center, CFNS Stony Brook University	14:00 - 14:20
	Simulation, Production & QA WG	
	Wang Center, CFNS Stony Brook University	14:25 - 14:45
15:00	Tracking WG	
	Wang Center, CFNS Stony Brook University	14:50 - 15:10
	Calorimetry WG	
16:00	Wang Center, CFNS Stony Brook University	15:15 - 15:35
	Coffee Break	
	Wang Center, CFNS Stony Brook University	15:40 - 16:00
17:00	Cherenkov PID WG	
	Wang Center, CFNS Stony Brook University	16:00 - 16:20
	TOF PID WG	
17:00	Wang Center, CFNS Stony Brook University	16:25 - 16:45
	Far Forward WG	
	Wang Center, CFNS Stony Brook University	16:50 - 17:10
17:00	Far Backward WG	
	Wang Center, CFNS Stony Brook University	17:15 - 17:35

July 27th

Collaboration
Formation
meeting
(Not run by SC)

EIC Project Status Update (25+10)	E. C. Aschenauer et al.
Wang Center, CFNS Stony Brook University	08:30 - 08:55

Detector-1 Institutional Representative Meeting	
Wang Center, CFNS Stony Brook University	09:05 - 10:20

Coffee Break	
Wang Center, CFNS Stony Brook University	10:20 - 10:50

DAQ/Electronics/Readout WG	
Wang Center, CFNS Stony Brook University	10:50 - 11:10

Inclusive WG	
Wang Center, CFNS Stony Brook University	11:15 - 11:35

Semi-Inclusive WG	
Wang Center, CFNS Stony Brook University	11:40 - 12:00

Exclusive, Diffraction, and Tagging WG	
Wang Center, CFNS Stony Brook University	12:05 - 12:25

Detector-1
PWG
Presentations

Lunch	
Wang Center, CFNS Stony Brook University	12:30 - 14:00
Jets and Heavy Flavor WG	
Wang Center, CFNS Stony Brook University	14:00 - 14:20
BSM & Precision EW WG	
Wang Center, CFNS Stony Brook University	14:25 - 14:45

Coffee Break	
Wang Center, CFNS Stony Brook University	14:50 - 15:20

Detector-1 GD/I WG Meeting and Summary	
Wang Center, CFNS Stony Brook University	15:20 - 17:30

GD/I Presentation
(20min)

Open discussion
(50min)

July 26th

09:00	Welcome, Agenda, and Meeting Organization details <i>Wang Center, CFNS Stony Brook University</i>	<i>Abhay Deshpande et al.</i> 08:30 - 08:45
	Update from the Project <i>Wang Center, CFNS Stony Brook University</i>	<i>Jim Yeck</i> 08:45 - 09:10
	Status of Detector I <i>Wang Center, CFNS Stony Brook University</i>	<i>Silvia Dalla Torre</i> 09:15 - 09:30
10:00	Status of Accelerator design <i>Wang Center, CFNS Stony Brook University</i>	<i>Todd Satogata</i> 09:35 - 10:00
	DOE Update <i>Wang Center, CFNS Stony Brook University</i>	<i>Timothy Hallman</i> 10:10 - 10:30
	Coffee Break <i>Wang Center, CFNS Stony Brook University</i>	10:35 - 11:00
11:00	Detector and Collaboration Process <i>Wang Center, CFNS Stony Brook University</i>	<i>Or Hen</i> 11:00 - 11:15
	Institutional Survey & Analysis <i>Wang Center, CFNS Stony Brook University</i>	<i>Bernd Surrow</i> 11:20 - 11:35
	Geometry, Consortia, and Detector-1 Integration <i>Wang Center, CFNS Stony Brook University</i>	<i>Tanja Horn</i> 11:40 - 11:55
12:00	Collaboration Name <i>Wang Center, CFNS Stony Brook University</i>	<i>John Lajoie</i> 12:00 - 12:15
	Q&A <i>Wang Center, CFNS Stony Brook University</i>	12:15 - 12:30
	Lunch <i>Wang Center, CFNS Stony Brook University</i>	12:30 - 14:00
14:00	Computing & Software WG <i>Wang Center, CFNS Stony Brook University</i>	14:00 - 14:20
	Simulation, Production & QA WG <i>Wang Center, CFNS Stony Brook University</i>	14:25 - 14:45
	Tracking WG <i>Wang Center, CFNS Stony Brook University</i>	14:50 - 15:10
15:00	Calorimetry WG <i>Wang Center, CFNS Stony Brook University</i>	15:15 - 15:35
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	Far Forward WG <i>Wang Center, CFNS Stony Brook University</i>	16:50 - 17:10
	Far Backward WG <i>Wang Center, CFNS Stony Brook University</i>	17:15 - 17:35

Detector-1
DWG
Presentations

Dear Conveners,

We invite you to contribute to the Detector-1 meeting at the EICUG Meeting at the end of July. The Tuesday, July 26th afternoon sessions are dedicated to reports from your WG.

<https://indico.bnl.gov/event/15342/timetable/#20220726.detailed>

20+5 minutes are reserved for each report, and we kindly ask you to respect the allocated time.

In your contribution we would like to ask that you **report on the consolidation and optimization activities within your WG, with reference to the initial charge given to the WGs when they were formed earlier this year** (see attached PDF). We fully understand that the timelines considered at the beginning of this process were quite challenging. We therefore understand that you **focus on the current status of the efforts in your WG along with future plans, with a special attention to the progress you want to make by the end of the year.**

Thank you.

July 27th

EIC Project Status Update (25+10)		E. C. Aschenauer et al.
Wang Center, CFNS Stony Brook University		08:30 - 08:55
09:00	Detector-1 Institutional Representative Meeting	
10:00	Coffee Break	
11:00	DAQ/Electronics/Readout WG	10:05 - 10:20
	Wang Center, CFNS Stony Brook University	10:20 - 10:50
	Inclusive WG	10:50 - 11:10
	Wang Center, CFNS Stony Brook University	11:15 - 11:35
	Semi-Inclusive WG	11:40 - 12:00
	Wang Center, CFNS Stony Brook University	12:05 - 12:25
12:00	Exclusive, Diffraction, and Tagging WG	12:30 - 14:00
	Wang Center, CFNS Stony Brook University	14:00 - 14:20
13:00	Lunch	14:25 - 14:45
14:00	Jets and Heavy Flavor WG	14:50 - 15:20
	Wang Center, CFNS Stony Brook University	15:20 - 17:30
15:00	BSM & Precision EW WG	
	Wang Center, CFNS Stony Brook University	
16:00	Coffee Break	
17:00	Detector-1 GDII WG Meeting and Summary	
	Wang Center, CFNS Stony Brook University	

Detector-1
PWG
Presentations

Dear Conveners,

We invite you to contribute to the Detector-1 meeting at the EICUG Meeting at the end of July. The Wednesday, July 27th sessions are dedicated to reports from your WG:

<https://indico.bnl.gov/event/15342/timetable/#20220727.detailed>

20+5 minutes are reserved for each report, and we kindly ask you to respect the allocated time.

In your contribution we would like to ask that you **report on activities within your WG, with reference to the initial charge given to the WGs when they were formed earlier this year** (see attached PDF). Please include in your **report the activities (performed and/or planned) to define the golden physics channels which should be used to guide the consolidation and optimization process.** In this context, please include both **physics channels studies in the Yellow Report as well as potential new opportunities within your WG.**

Thank you.

July 27th

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17:00		
	Wang Center, CFNS Stony Brook University	
	15:20 - 17:30	

GD/I Presentation
(20min)

Open discussion
(50min)

Dear GD/I WG Conveners,

We invite you to contribute to the Detector-1 meeting at the EICUG Meeting at the end of July. The closing session on Wednesday, July 27th sessions is dedicated to a report from your WG:

<https://indico.bnl.gov/event/15342/timetable/#20220727.detailed>

20+5 minutes are reserved for each report, and we kindly ask you to respect the allocated time.

In your contribution we would like to ask that you report on **activities within your WG, with reference to the initial charge given to the WGs when they were formed earlier this year** (see attached PDF). This should include **an overview of past activity as well as future plans**. For example, the GD/I group has recently received the first recommendations from the **Calorimetry WG**, and this can be used as an example of how the consolidation and optimization process is proceeding in your working group.

Thank you.

Institutional survey analysis

- Survey analysis tools shared with you two weeks ago:



Survey analysis and Tools

- Link to data file:

Click here: https://tuprd-my.sharepoint.com/:x:/g/personal/tue59914_temple_edu/EcGrTZU6CuFPjXt1foRZY-4Bv5z1In1x2wY9Li3y9YgwnQ?e=aQrWQp

incl. PIVOT tables for physics/sub-system interests by institution!

- Would like to discuss the best way to use it, stating from a concrete proposal:
 - Each WG conveners review the groups that expressed interest in their area, including information provided on the experience, abilities etc. (if provided).
 - Reach out to each group that is not already attending WG meetings to:
 - (A) Acknowledge your awareness of their interest and,
 - (B) Welcome them to start attending the WG meetings.
 - Setup an indico page for each of your sub systems and ask all groups (active in the WG or not) that express interest in working on this system to upload 2 – 3 slides introducing, at a high-level, their interest, experience and abilities. Hope that this will give you a better view of who and what experience is ‘out there’ and help you think of how to best integrate groups to best support your efforts. Ok that not everyone will respond in a timely fashion.

What do you think?

Design maturity: physics performance

- Our overarching goal is to optimize the global detector design to realize core(++) EIC physics measurements.
- Through YR and proposal studies we saw different sub systems complement and supplement each other. Therefore, the best way to assess global integrated performance is via physics studies. (just like assessing an orchestra by hearing it play a beautiful concert)
- We would like to encourage all groups to take a closer look at global studies.

PWGs should continue elaborating their list of golden studies and make it accessible to DWGs so they know what analyses are coming. Would be great to motivate each study by its importance for the physics program and/or for its assessment of global detector performance.

An example of a potentially interesting questions for WG to address can be:

“Does the excellent EMCal performance in the backwards region impact our understand of the required tracking resolution in the backwards acceptance?”

“Groups have advanced our understanding of DIS kinematic reconstruction via global analysis of many sub-system measurements. Does it impact our technical performance requirements in any way?”