



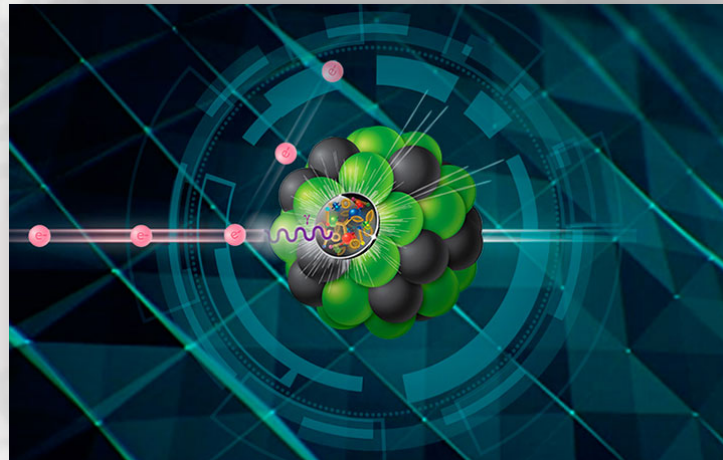
# Closing remarks

## EICUG 2nd YR Workshop - Pavia Workshop

### May 22, 2020

Rolf Ent (JLab) & Marco Radici (INFN Pavia) &  
Bernd Surrow (Temple University) & Thomas Ullrich (BNL)

*On behalf of the EICUG Steering Committee*



# YR activity - THANK YOU!

□ Activities of YR effort in full swing!

□ YR Working Groups:

Thank you to all conveners, co-conveners and WG members!

○ **Detector Working Group:** <http://www.eicug.org/web/content/yellow-report-detector-working-group>

□ **Conveners:** Ken Barish, Tanja Horn, Peter Jones, Silvia Dalla Torre

□ **WG's (9):** Tracking, Particle ID, Calorimetry, Far-Forward Detectors, DAQ/Electronics, Polarimetry/Ancillary Detectors, Central Detector/Integration & Magnet, Forward Detector/IR Integration, Detector Complementarity

○ **Physics Working Group:** <http://www.eicug.org/web/content/yellow-report-physics-working-group>

□ **Conveners:** Adrian Dimitru, Olga Evdokimov, Andreas Metz, Carlos Munoz Camacho

□ **WG's (5):** Inclusive Reaction, Semi-Inclusive Reactions, Jets & Heavy Quarks, Exclusive Reactions, Diffractive Reactions and Tagging

○ **Software Working Group:** <http://www.eicug.org/web/content/eic-software>

□ **Conveners:** Andrea Bressan, Markus Diefenthaler, Torre Wenaus

# YR activity - Take-away message

## (Some) take-away messages 2<sup>nd</sup> YR meeting @ Pavia

- **Lots of efforts and progress since 1<sup>st</sup> YR meeting @ Temple!**
- The EIC continues to have an *excellent and growing* science case
- This science points to a *uniquely versatile* accelerator, IR and detector design
- All stakeholders agree that a second IR and detector is desirable – we had a nice complimentary detector and accelerator/IR session to continue this goal
- We need a **hermetic** detector for our science, with *more space and less material...*
  - In the central detector, forward rapidity region: EM/hadron calorimetry and tracking seem space starved, and PId is space hungry
  - In the central detector, mid-rapidity region space also at a premium: an all-Si or mostly-Si with some gaseous based layers could provide some space
  - We need good  $e/\pi$  separation for much of our electron-scattering science
  - We need detectors along the far-forward beam line (EMCal after B0, an off-momentum detector, EMCal and tracking before ZDC, large ZDC with good resolution, etc.) – requirements are refining!
- We start worrying more about integration topics, **this is a good sign**
  - We saw less separate and more integrated parallel session topics this YR meeting
  - We saw progress on central and forward detector integration topics
  - Need to document hand-off detector interactive matrix between PWG and DWG
- **On for more at the 3<sup>rd</sup> YR meeting @ CUA!!!**

## Goal set for 3rd YR Workshop:

“Present mature studies of detector requirements from physics processes, balance detector concepts versus impact on physics measurements. Discuss possible systematics reduction among complementary detector choices. Complete final “to-do” list for YR(s).”

# Summer EICUG Meeting

□ Summer EICUG Meeting: <https://indico.bnl.gov/event/7352/>

○ August 3-7, 2020

○ SC in close contact with local organizers: Wim Cosyn, Lei Guo, Misak Sargsian  
(contact)

○ Will assess situation at the end of May and determine to either host or  
postpone meeting!

□ Workshop schedule:

○ 3rd YR Workshop - 17-19 September 2020, CUA - Washington D.C. (USA)

○ 4th YR Workshop - 19-21 November 2020, UCB - Berkeley (USA)



# Charter

- **EICUG Charter:** <http://www.eicug.org/web/sites/default/files/EICUG-Charter-01122018.pdf>

"When wording of a CDO mission statement for the EIC project has been decided by the funding agencies, the SC chair will appoint a new charter committee whose members will, within 6 months of its formation, present a draft charter for Phase 2 to be approved by two-thirds majority of the IB."

- **New charter writing committee:** John Arrington (Argonne Nat. Lab. - US), Will Brooks (USM Valparaiso, Chile), Olga Evdokimov (Univ. of Illinois, Chicago - US), Yuji Goto (RIKEN, Japan), Barbara Jacak (LBNL & Univ. California at Berkeley - US), **Richard Milner (MIT - US) (Co-chair)**, Marco Radici (INFN Pavia, Italy), **Franck Sabatié (Saclay, France) (Co-chair)**, Sevil Salur (Univ. Rutgers - US) and Daria Sokhan (Univ. Glasgow, UK)

# Upcoming Elections

## □ Current terms:

<http://eicug.org/web/content/electron-ion-collider-users-group-eicug>

## □ Upcoming elections:

- The Committee has started to work on the upcoming election for the office of *International Representative on the EICUG Steering Committee*.
- The *new term will start on July 1st, 2020*. Yuji Goto has agreed to continue in his present term until June 30th, 2020.
- The nomination and election process started in April 2020.
- Call for nominations was sent out!




# EoI process

## *Expression of Interest Timeline*

*(non-binding)* Expressions of Interest (EoI) to get *guidance on detector scope*

Introduce concept and timeline for Call for Expressions of Interest March 2020  
*(introduce notion for Expressions of Interest for contribution to EIC detectors in plenary talks at 1<sup>st</sup> Yellow Report (remote) meeting at Temple)* 

Discussion Call for EoI for **potential cooperation** to EIC Detectors   
*initial discussion session at Remote EICUGM* April 23 2020  
*final discussion at 2<sup>nd</sup> Yellow Report meeting at Pavia* May 20 2020

Call for EoI for potential cooperation to EIC Detectors May 31 2020  
*(issue call after folding in feedback of EICUG)*

**Deadline EoI for potential cooperation to EIC Detectors** **November 1 2020**

Status report at 4<sup>th</sup> (final) Yellow Report meeting at UCB/LBL November 19-21 2020  
*(Request for discussion session at 4th Yellow Report meeting on 2nd IR ideas based on YR and Accelerator Task Force status)*

Evaluate EoI and inform Call for Detector Proposal(s) February 2021  
*(complete after assumed January 2021 Yellow Report completion, EoI can give guidance on detector scope)*

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2nd Yellow Report Meeting at Pavia, May 20th 2020

Elke Aschenauer and Rolf Ent





# Timeline beyond EoI

## Timeline beyond Expression of Interest

Assumption: CD-1 aligned with accelerator timeline  
 Goal: CD-2 & CD-3 also aligned!

Request Topical week-long workshop on 2nd IR early February 2021  
*(accelerator discussion and science discussion on 2nd IR goal and needs such that we can potentially integrate in Call for Detector Proposals)*

### Form EIC Collaboration(s)


Issue Call for Detector Proposals <i>(consistent with EICUGM assumptions of early 2021)</i>	March 2021
Deadline for Proposals <i>(roughly in phase with projected CD-1 date)</i>	September 2021
Detector Advisory Committee Meeting <i>(to guide work in TEC phase)</i>	November 2021
Selection of Detector(s) <i>(one or two, pending Expression of Interest response)</i>	December 2021
CD-2	September 2022
CD-3 <i>(CD-2 and CD-3 dates assumed for planning purposes)</i>	September 2023

*Note: time to complete >80% of the full engineering & design for detector at CD-3 is tight, so we need to keep the YR efforts in motion for completion in January*

Elke Aschenauer and Rolf Ent







# Recording the session

## 2nd EIC Yellow Report Workshop at Pavia University

20-22 May 2020

Online

US/Eastern timezone

Overview

Remote Login  
Instructions

Timetable

Open mic session

Accel./IR design: Q. & A.  
session

Recording

Contribution List

My Conference

My Contributions

### Recording

**Wednesday, May 20:** [click here](#)

**Thursday, May 21:**

**Parallel sessions, morning:**

- - Forward detector/IR & central detector
- - Diffractive reactions and Tagging WG
- - Calorimeter & Particle ID & Tracking - part 1
- - Calorimeter & Particle ID & Tracking - part 2
- - Exclusive Reactions

**Joint sessions, morning:**

- - Diffractive&Tagging + Exclusive joint session
- - Inclusive+SIDIS+Jets&HQ joint session

**Cross-joint sessions, afternoon:**

- - Diffractive&Tagging + Exclusive with DWG
- - Inclusive+SIDIS+Jets&HQ with DWG

**Friday, May 22:** [click here](#)

work in progress..

## Concluding Remarks

- We are in the middle of a world health crisis - Please take good care of yourself / your loved ones, friends and colleagues!
- Many of us continue to work from home - hopefully we can go back to our offices / labs soon.
- Let's continue to remain in close contact through regular remote video conference meetings - The EIC Yellow Report activity will and should focus our attention on what unites us moving forward in this difficult time!



## Concluding Remarks

Thank you!

Graduate students: [Navagyan Ghimire](#), [Bianca Gualtieri](#), [Nicholas Lukow](#), [Jae Nam](#) and [Babu Pokhrel](#)  
and [Amilkar Quintero](#) and [Matt Posik](#)  
for helping out with ZOOM reservation!

# Physics in the Infinite Momentum Frame

form factors  
TMD GPD

PDF → May, 20-22, 2020



Marco Radici  
Bernd Surrow

Local Organizing Committee  
EICUG Steering Committee