

# EIC User Group Institutional Board Meeting

Christine Aidala (U. of Michigan), Andrea Bressan (Trieste)

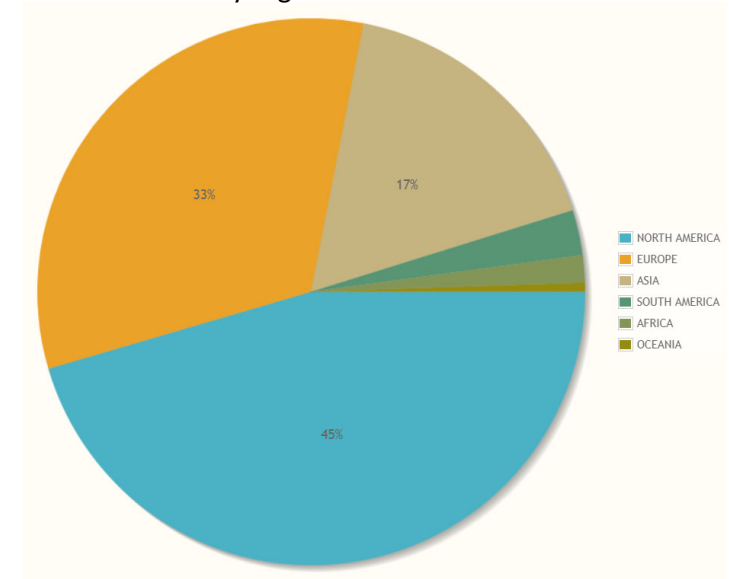
- IB members and official delegates – Please sit in the front half of the room and sign in (sheet being passed around)

## Agenda

- 14:30-14:35 – Welcome and composition of the EICUG - Christine Aidala and Andrea Bressan
- 14:35-15:00 - Proposals to host the 2020 and 2021 EICUG meetings; Vote
  - Daniel Tapia Takaki, proposing to host at U. of Kansas, 2020
  - Misak Sargsian, proposing to host at Florida International U., 2020
  - Jakub Wagner, proposing to host in Warsaw, 2021
- 15:00-15:20 - Regional updates
  - Daria Sokhan – UK
  - Yuji Goto - Japan
- 15:20-15:30 - Brief in-person introductions from groups that joined in the last 12 months
  - Ronan McNulty - University College Dublin
  - Tobias Toll - IIT Delhi
  - Vladimir Skokov - North Carolina State U.
- 15:30-16:30 - Discussion: What is required between CD-0 and collaboration formation, and the role of the EICUG

# Composition of the EICUG

Institutions by region of the world



- 881 members from 187 institutions in 30 countries
  - 40% of institutions from U.S., 60% international
  - 4 private companies (no IB representation)
  - Growth from 834 members as of Nov 2018

- 15 institutions have joined since last EICUG meeting

- Acadia University (Canada) – this week!
- IIT Bombay (India)
- [IIT Delhi \(India\) – intro by Tobias Toll](#)
- Kent State University (U.S.)
- Laboratoire de Physique Theorique, University of Paris Sud (France)
- Lamar University (U.S.)
- Lebanon Valley College (U.S.)
- Moscow State University (Russia)
- National Cheng Kung University (Taiwan)

- NIKHEF (Netherlands)
- [North Carolina State University \(U.S.\) – intro by Vladimir Skokov](#)
- Rockefeller University (U.S.)
- Saha Institute of Nuclear Physics (India)
- [University College Dublin \(Ireland\) – intro by Ronan McNulty](#)
- Wayne State University (U.S.)

# Proposals to host the 2020 and 2021 EICUG meetings

- Daniel Tapia Takaki, proposing to host at U. of Kansas, 2020
- Misak Sargsian, proposing to host at Florida International U., 2020
- Jakub Wagner, proposing to host in Warsaw, 2021

# Regional updates

- Daria Sokhan, U. of Glasgow – UK
- Yuji Goto, RIKEN - Japan

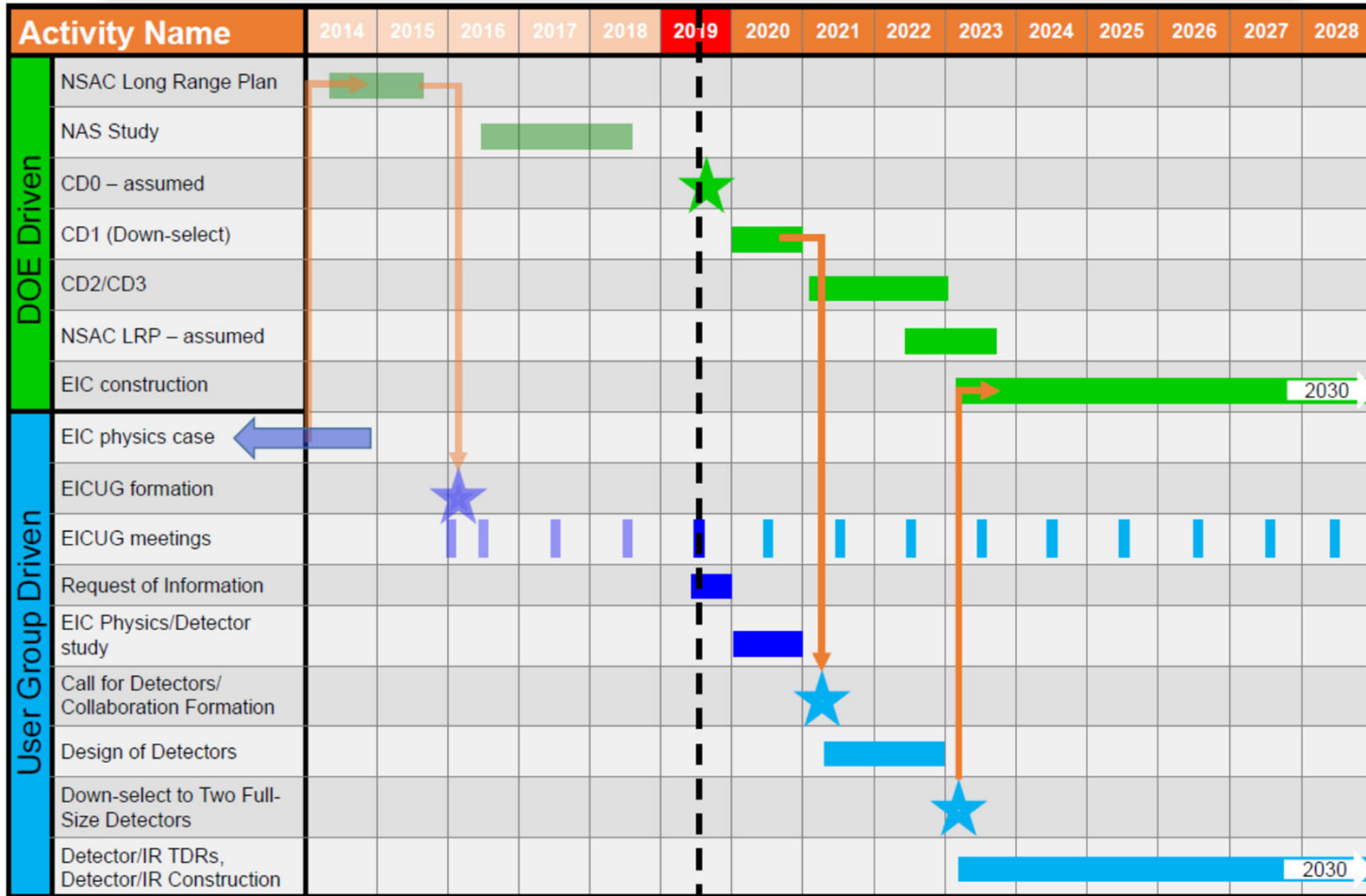
# In-person introductions from groups that joined in the last 12 months

- Ronan McNulty - University College Dublin
- Tobias Toll - IIT Delhi
- Vladimir Skokov - North Carolina State U.

Discussion: What is required between CD-0 and collaboration formation, and the role of the EICUG



# EICUG Timeline



EIC Users' Group Meeting - Paris  
Paris, France, July 22-26, 2019

Charles Hyde &  
Bernd Surrow



# EICUG Detector Timeline Steps

	Request of Information	EIC Physics / Detector Design Study	Collaboration Formation. Call for Detectors	Design of Detectors	Down Select to two full size detectors	Detector/IR TDR and Construction
2019	↓	↓				
2020		↓				
2021			★			
2022				↓		
2023					★	
2024						↓ TO 2030

User Group Driven

Collaboration Driven

TO 2030

EIC Users' Group Meeting - Paris  
Paris, France, July 22-26, 2019

Charles Hyde &  
Bernd Surrow

C. Aidala + A. Bressan, EICUG Meeting, Paris,  
July 2019



# Immediate next step: Request for Information (by Aug 30)

## EICUG Request of Information

### Size of the Institutional Group

The following three pages correspond to the following work areas:

- Theory
- Experimental Physics
- Accelerator Science

On each page, please provide the typical size of your research groups in specific categories of personnel based on your current institutional capabilities/funding.

Please provide comments about your assumptions on the separate comment page at the end of this section.

BACK

NEXT

### Physics Interests

In the list below, please check your main institutional physics interests indicating for each selected topic whether it's covered by theory or experiment-oriented faculty/senior staff

#### Interests

	Theory	Experiment
Longitudinal (spin) nucleon structure	<input type="checkbox"/>	<input type="checkbox"/>
3D nucleon/nucleus structure	<input type="checkbox"/>	<input type="checkbox"/>
High density parton physics	<input type="checkbox"/>	<input type="checkbox"/>
Beyond Standard Model/Electro-weak physics	<input type="checkbox"/>	<input type="checkbox"/>
Hadronization and fragmentation	<input type="checkbox"/>	<input type="checkbox"/>
Nuclear structure/Short-range correlations	<input type="checkbox"/>	<input type="checkbox"/>
Origin of nuclear force	<input type="checkbox"/>	<input type="checkbox"/>
Collective effects	<input type="checkbox"/>	<input type="checkbox"/>
Spectroscopy	<input type="checkbox"/>	<input type="checkbox"/>
Origin of mass	<input type="checkbox"/>	<input type="checkbox"/>
Accelerator physics and technology	<input type="checkbox"/>	<input type="checkbox"/>

### Infrastructure

Where applicable, please provide a brief description of your computing/laboratory/workshop infrastructure - including specialized equipment

#### Computing Infrastructure

Your answer

#### Detector Labs/Clean rooms

Your answer

#### Machine Shop

Your answer

#### Other Infrastructure

Your answer

Next:

## EIC Detector and Physics Design Study

- Purpose: Advance the state of documented physics studies (Whitepaper / Detector and Physics Handbook) in preparation for EIC.
    - Quantify physics measurements for existing or new physics topics
    - Quantify detector needs and requirements (resolution, segmentation, grouping)
    - Engage the EIC community independent of laboratories
    - Create conditions for formation of Experimental Collaborations
- Request that each physics study include table of explicit detector requirements, including minimum requirements?
- Proposal: EIC Users Group plans a long (~1 year) workshop series whose output is a physics/detector book that is composed of papers (typically 10 to 20 pages long) authored by the participants in the workshop series (as required, this can be repeated to prepare for later phases of the EIC).
  - Format: Define 5 - 10 "areas" and appoint conveners (Experimentalists / Theorist) for each area, and one member of the EICUG Steering Committee as observer. The conveners accept proposed topics for study and organize meetings when appropriate. The Steering Committee observer has the responsibility to ensure activity and progress.

# Balancing bottom-up and top-down efforts within the EICUG

- Bottom-up – community members bringing their own expertise and interests, driving facility/detector design and the planned physics program
- Top-down (in context of EICUG—not labs/funding agencies) – look for needs that aren't being met, coordinate activities, integrate studies

# Collaboration formation – considerations regarding number of detectors

- Community should work toward >1 detector!  
Impacted by
  - Size of community
  - DOE and international resources
  - Coordination within countries/by funding sources
- Detector complementarity
  - Different optimization of two detectors?
    - Some optimizations may potentially impact how facility is run, e.g. ideal frequency of reinjection
  - Design *a priori* for complementary systematics? (Rik's talk yesterday)

# Continuing the discussions within the IB

- Next IB meeting – tentatively Thursday, October 10
- Suggestions for specific discussion topics welcome
  
- [caidala@umich.edu](mailto:caidala@umich.edu)
- [Andrea.Bressan@ts.infn.it](mailto:Andrea.Bressan@ts.infn.it)

# Extra

# EICUG Composition—other statistics

- 58% experimentalists, 21% theorists, 16% accelerator physicists, 0.3% support, 4% other/unlisted

