

# Forming the DSCs for the Next 2-year Term

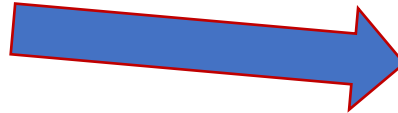
John Lajoie and Silvia Dalla Torre

Forming the DSCs

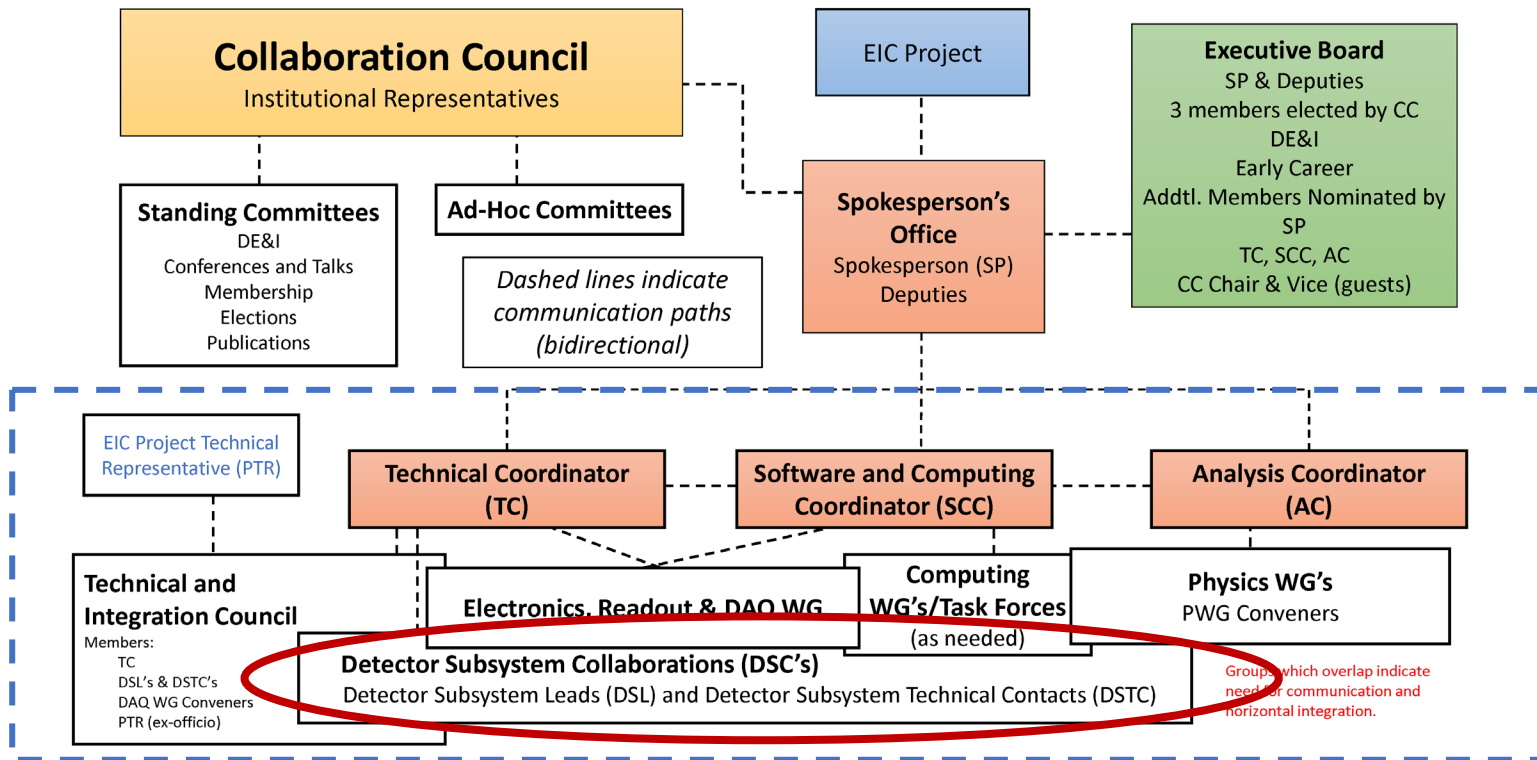
Meeting Tracking WG, March 9, 2023

# Collaboration Structure Including the Scientific Structure for the Next Two-Year Term

The matter to be addressed today



- Need to *evolve DWGs* to a structure more appropriate to the (pre-)TDR/construction phase: **WGs → Detector Subsystems**
- Each project corresponds to a subdetector built by a **Detector Subsystem Collaboration (DSC)** of the groups and institutions contributing to it
- Each project collaboration will choose its **Detector Subsystem Lead (DSL)** and **Detector Subsystem Technical Contact (DSTC)**
- DSL/DSTC (Collab.) <-> L4 Tech. Contacts (Project)



# In evidence

- **Our definition of a DSC:**
  - A collaboration formed by groups that work together to design, build and later operate and maintain a detector sub system

# DSC scheme (*draft*)

DWG	DSC	Notes
(now)	(in management plan)	
tracking	Si trackers	building on silicon consortium
	Gaseous trackers	
calorimetry	backward ECal	building on EEMCal consortium
	backward HCal	
	barrel ECal	
	barrel HCal	
	forward ECal	
	forward HCal	
	HCal insert	presently not in the reference detector
Cherenkov PID	backward RICH	
	DIRC	
	dRICH	
ToF	barrel AC-LGADs	
	forward AC-LGADs	
far forward	tracking (RPs, off-momentum)	from conferring with the existing conveners
	B0	
	ZDC	
far backward	Lumi Pair Spectrometer	following a suggestion of the existing conveners
	Lumi calorimeters	
	low Q <sup>2</sup> taggers	

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Just a draft:  
Your input to improve the scheme is welcome

# Specific of tracking subsystems

- The overall tracking optimization is an ongoing process
  - **This effort is certainly cross-cutting to the tracking DSCs; AC-LGAD system to be included in the effort**
  - Need to consider also external information (from calorimetry, from Cherenkov PID)
  - A dedicated taskforce seems appropriate
- MAPS design/production
  - Perspectives of the modified “ITS3” version needed beyond the vertex layer and specific to ePIC
- Tracking reconstruction software
  - Important effort ongoing
  - A temporary approach to progress while waiting for ACTS in full functionality seems the way to go at present

# SOME QUESTIONS FOR THE TODAY DISCUSSION

- **Draft list of Tracking DSCs**
  - Adequate?
    - 1 vs 2 DSCs dedicated to Si Tracking, when this is motivated by separate construction efforts
    - AC-LGAD can become one more DCS in the tracking area
- **Preliminary list of groups in the DSCs**
  - **First order estimation of the workforce available**
  - **Who takes care of what?**
  - **What is needed and not taken care by anyone so far?**
  - **Expected in-kind? For which items ?**
- **A taskforce for global tracking optimization**
  - Is this a reasonable way to progress?
- **Technical issues**
  - Comments about the brute and schematic assessment of the technical issues (previous slide)