

LCG meeting, April 17th 2024

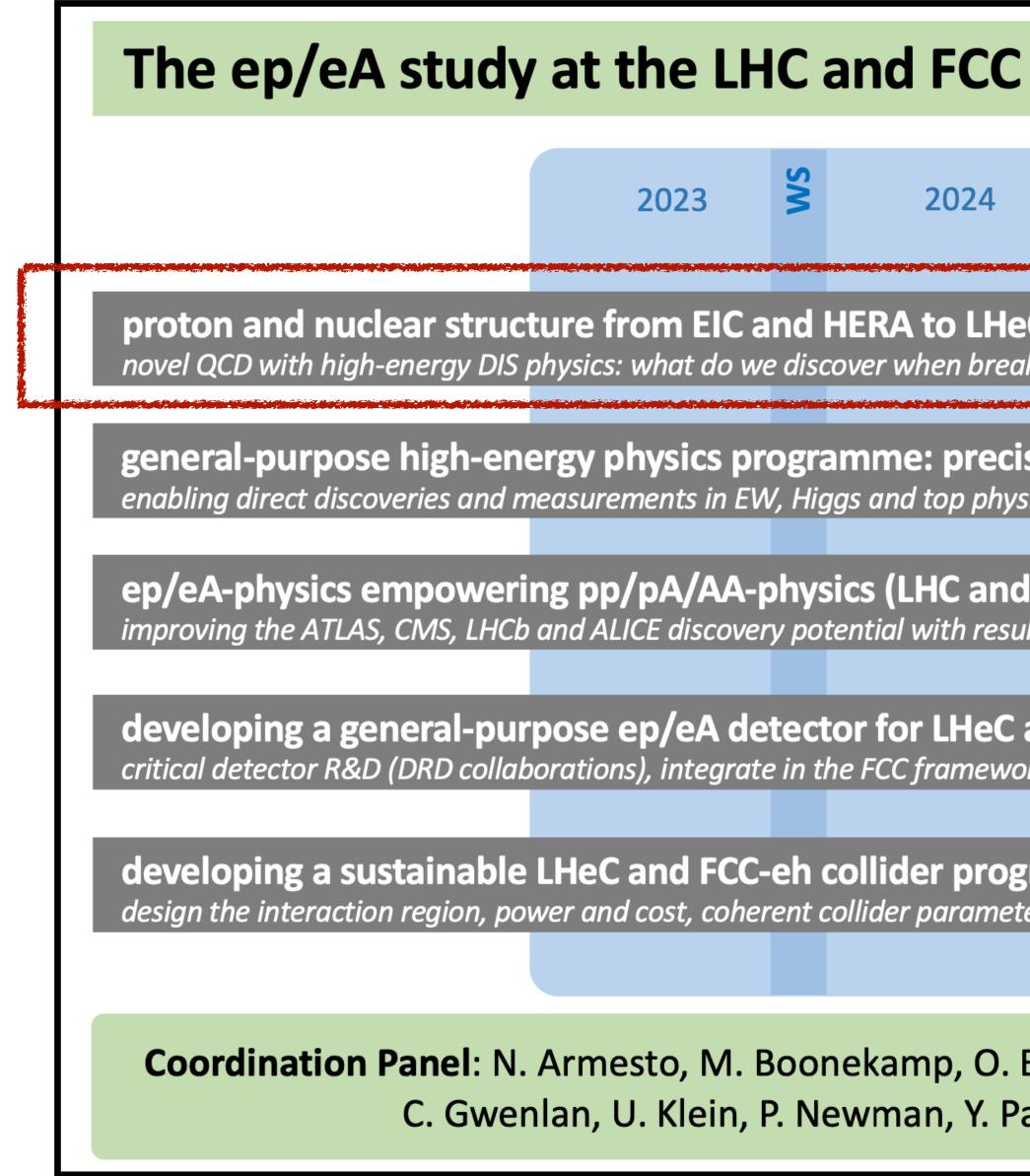
Proton and nuclear structure from EIC to LHeC and FCC-eh

Néstor Armesto (Santiago de Compostela), Claire Gwenlan (Oxford) and Paul Newman (Birmingham)









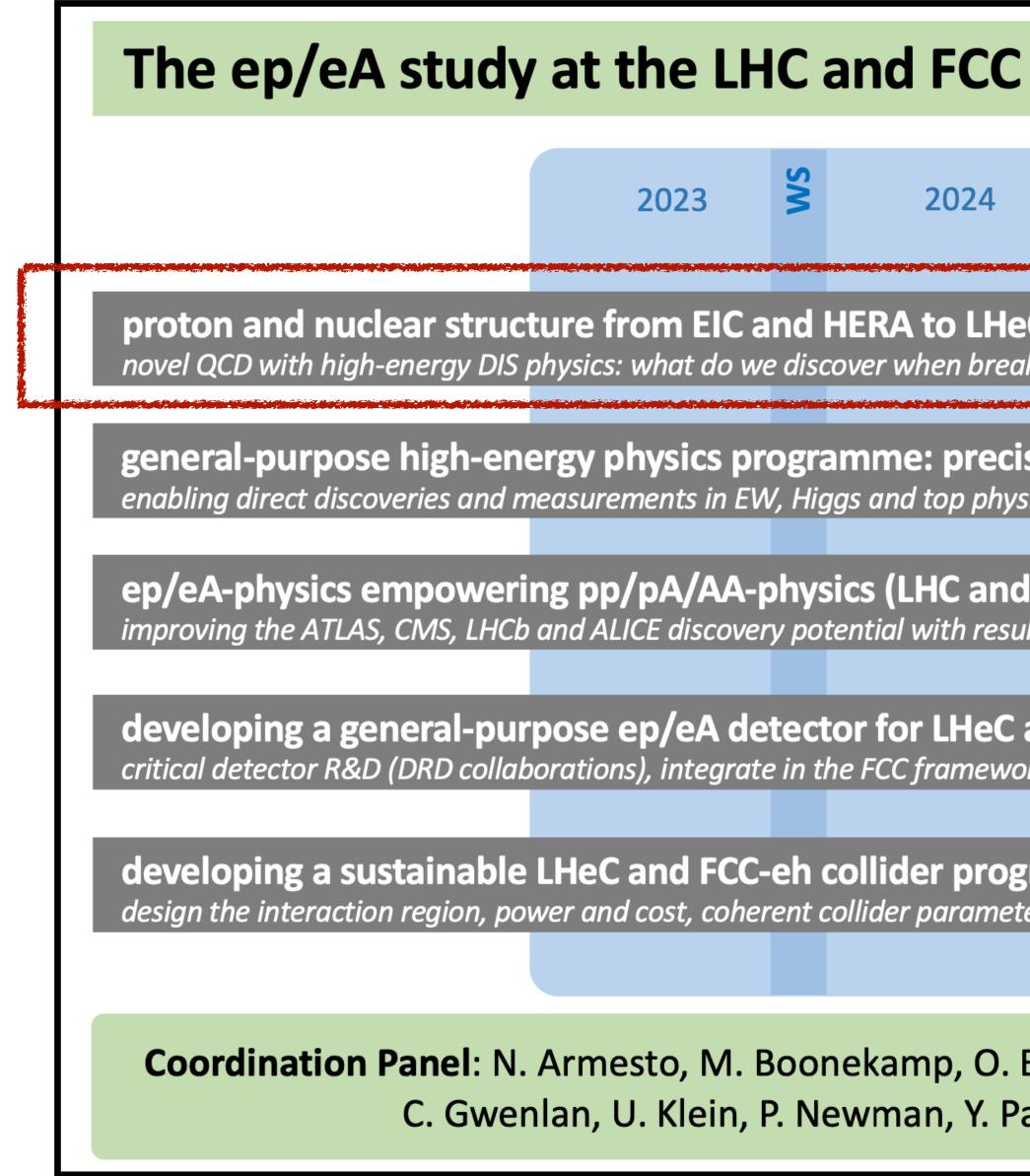
Themes

The ep/eA study at the LHC and FCC – new impactful goals for the community

WS	2025	TWS	input to ESPP		
			and the distance of the second se	typically 2-3 conveners	
leC and FCC	-oh			per theme	
eaking protons		itter in	smaller pieces	 annual ep/eA workshops (MS) 	
cision physi sysics with high-				 final thematic workshop with closing reports to inform the 	
n d FCC) sults from a hig	h-energy DIS pl	hysics	programme	upcoming Strategy process with impactful information (TWS)	
C and FCC-e		′pp/eA,	/pA/AA physics	 inform the community with regular ep/eA Newsletters 	
o gramme eters & run plar	n, beam optimi	zation,		 everybody is welcome to join 	

Coordination Panel: N. Armesto, M. Boonekamp, O. Brüning, D. Britzger, J. D'Hondt (spokesperson), M. D'Onofrio, C. Gwenlan, U. Klein, P. Newman, Y. Papaphilippou, C. Schwanenberger, Y. Yamazaki





Themes

С	tful goals for the community	ommunity	
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	J. D'Hondt (spokesperson), M. D'Onofrio, wanenberger, Y. Yamazaki	M. D'Onofrio,	

Three items for the WS:

 PDF and alphas for the combination HERA+EIC+LHeC+FCCeh. Katarzyna Wichmann (CMS and ZEUS, DESY, contacted) and Tom Cridge (MSHT, DESY).

hidden in PDFs and how much DIS can help. maybe, some persons in the US (<u>https://arxiv.org/abs/2306.05564</u>).

 Saturation and resummation beyond inclusive observables in DIS. Heikki Mantyssari (Jyväskyla, informally approached).

- From more to less probable:

- SMEFT fits of DIS+hh to resolve degeneracies and clarify how much new physics can be
- Maria Ubiali (NNPDF, Cambridge), Juan Rojo (NNPDF, VU Amsterdam, showed interest) and,

