



Status Update ATHENA Costing Collaboration/Costing Chapter

Bernd Surrow



On behalf of the ATHENA Costing Team

(Olga Evdokimov, Yulia Furletova, Bernd Surrow, James Symons, and Zhangbu Xu)





Outline

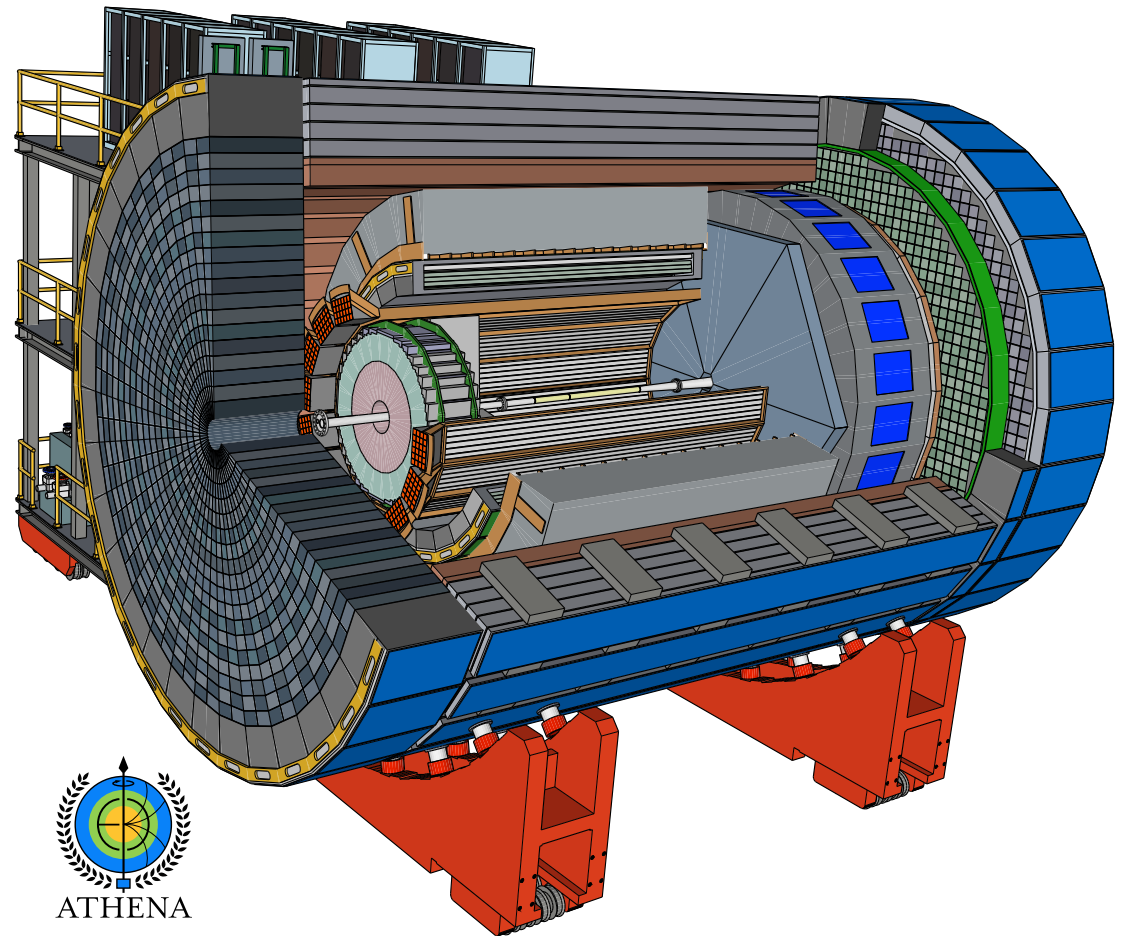
- Chapter 4: Overview

(Silvia & Bernd)

- Chapter 5: Overview

(Costing Team)

- Summary



ATHENA



Chapter 4: Collaboration

- Link to Chapter 4: Collaboration

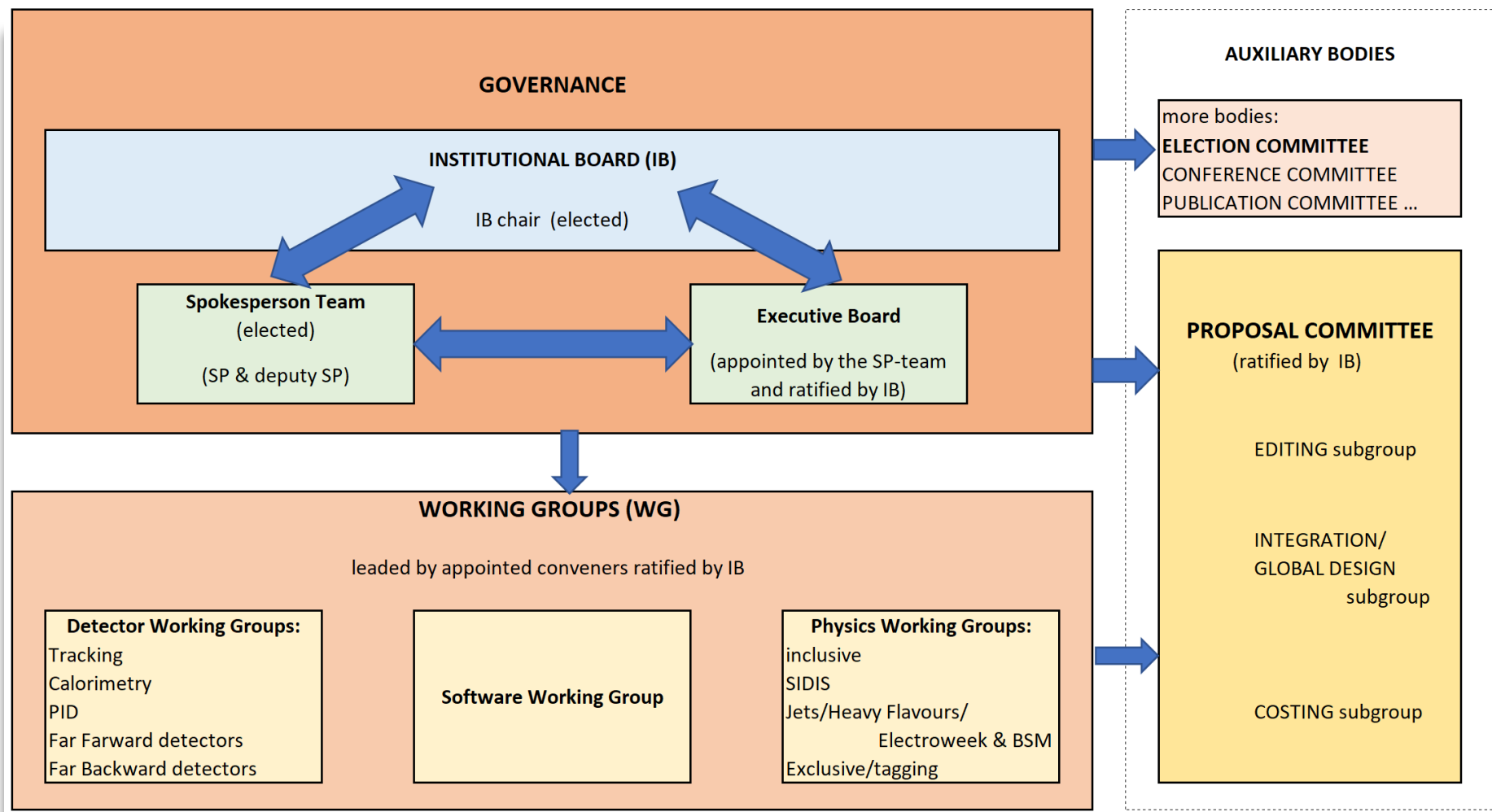
- Planned for 6/20 pages
- Current length: 6 pages / 5 figures - Text and figures are in final draft form!
- Posted Proposal draft:

https://www.dropbox.com/s/ey1cy2py9yl61b2/ATHENA_Proposal_110821.pdf?dl=0



Chapter 4: Collaboration

□ Figure 1: Organizational structure of the ATHENA collaboration



Chapter 4: Collaboration

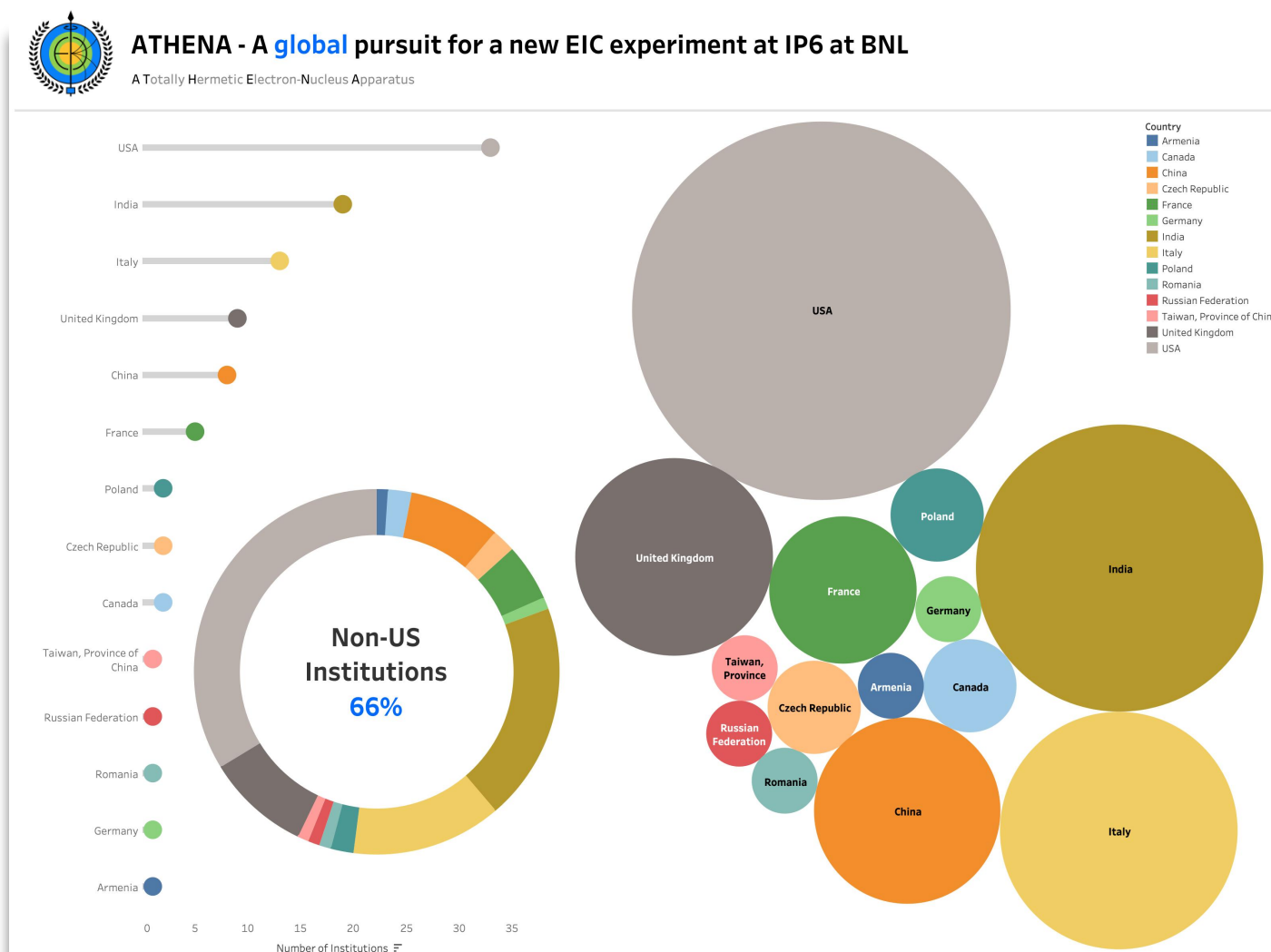
Figure 2: Comprehensive overview of all ATHENA collaboration committees and working groups

MANAGEMENT	before implementing the Charter	Coordination Committee	Silvia Dalla Torre (INFN Trieste, Italy) Abhay Deshpande (Stony Brook University, USA) Olga Evdokimov (Illinois Chicago University, USA) Yulia Furltova (Jefferson Lab, USA)	Barbara Jacak (Berkley University, USA) Alexander Kiselev (BNL, USA) Franck Sabatie (CEA, France) Bernd Surrow (Temple University, USA)	
		preliminary Institutional Board	a representative from each Institution		
	Charter implementation	Institutional Board	members from each Institution according to the group size as specified in the Charter chair : Ernst Sichtermann (BNL, USA)		elected
		Spokesperson (SP) team	SP : Silvia Dalla Torre (INFN Trieste, Italy) Deputy SP : Bernd Surrow (Temple University, USA)		elected
		Executive Board	chair : Silvia Dalla Torre (INFN Trieste, Italy) ex officio : Ernst Sichtermann (BNL, USA) Abhay Deshpande (Stony Brook University, USA) Olga Evdokimov (Illinois Chicago University, USA)	Yulia Furltova (Jefferson Lab, USA) Barbara Jacak (Berkley University, USA) Sylvester Joosten (ANL, USA) Franck Sabatie (CEA, France) Thomas Ullrich (BNL, USA)	ratified by IB
COLLABORATION SUPPORT		Election Committee	Pietro Antonioli (INFN Bologna, Italy) John Arrington (BNL, USA) Nicole d'Hose (CEA, France)	Yulia Furltova (Jefferson Lab, USA) Sylvester Joosten (ANL, USA) Brian Page (BNL, USA)	ratified by IB
AD HOC BODIES		Charter Committee	Ken Barish (California Riverside University, USA) Nicole d'Hose (CEA, France) Zein-Eddine Meziani (ANL, USA) Olga Evdokimov (Illinois Chicago University, USA) David Gaskell (Jefferson Lab, USA) Thomas Hemmick (Stony Brook University, USA) Bedanga Mohanty (NISER, India)	Marta Ruspa (INFN Torino, Italy) Murad Sarsour (Georgia State University, USA) Ernst Sichtermann (BNL, USA) Daria Sokhan (Glasgow, UK and CEA, France) Thomas Ullrich (BNL, USA) Anselm Vossen (Duke University, USA) Qinghua Xu (Shandong University, China)	ratified by IB
SCIENTIFIC BODIES	Working Groups (WG)	Software WG	Whitney Armstrong (ANL, USA) Andrea Bressan (INFN Trieste, Italy) Wouter Deconinck (Manitoba University, Canada)	Sylvester Joosten (ANL, USA) Dmitry Romanov (Jefferson Lab, USA)	ratified by IB
		Tracking WG	Francesco Bossu (CEA, France) Domenico Elia (INFN Bologna, Italy)	Laura Gonella (Birmingham University, UK) Matt Posik (Temple University, USA)	
		Calorimetry WG	Vladimir Berdnikov (Catholic University of Paul Reimer (ANL, USA)	Oleg Tsai (BNL, USA)	
		PID WG	Frank Guerts (Rice University, USA) Thomas Hemmick (Stony Brook University, USA)	Roberto Preghenella (INFN Bologna, ITALY)	
		Far Backward WG	John Arrington (BNL, USA)	Alexander Jentsch (BNL, USA)	
		Far Forward WG	Jaroslav Adam (BNL, USA)	Krzysztof Piotrkowski (Louvain Catholic University, Belgium)	
		Inclusive WG	Paul Newman (Birmingham University, UK) Barak Schookler (Stony Brook University, USA)	Quighua Xu (BNL, USA)	
		SIDIS WG	Marco Radici (INFN Pavia, Italy)	Anselm Vossen (Duke University, USA)	
		Jets/Heavy Flavours/ Electroweek & BSM WG	Miguel Arratia (UC Riverside, USA) Brian Page (BNL, USA)	Stephen Sekula (SMU, USA) Ernst Sichtermann – EPSichtermann@lbl.gov	
		Exclusive/Tagging	Salvatore Fazio (INFN Cosenza, Italy) Spencer Kein (BNL, USA)	Daria Sokhan (Glasgow, UK and CEA, France)	
	Proposal Committee	Editing Subgroup	Abhay Deshpande (Stony Brook University, USA) Barbara Jacak (Berkley University, USA)	Peter Jones (Birmingham University, UK) Zein-Eddine Meziani (ANL, USA)	ratified by IB
		Integration/Global Design Subgroup	Silvia Dalla Torre (INFN Trieste, Italy) Bedangadas Mohanty (NISER, India) Alexander Kiselev (ANL, USA)	Franck Sabatie (CEA, France) Thomas Ullrich (BNL, USA)	
		Costing Subgroup	Olga Evdokimov (Illinois Chicago University, USA) Yulia Furltova (Jefferson Lab, USA)	Bernd Surrow (Temple University, USA) Zhangbu Xu (BNL, USA)	



Chapter 4: Collaboration

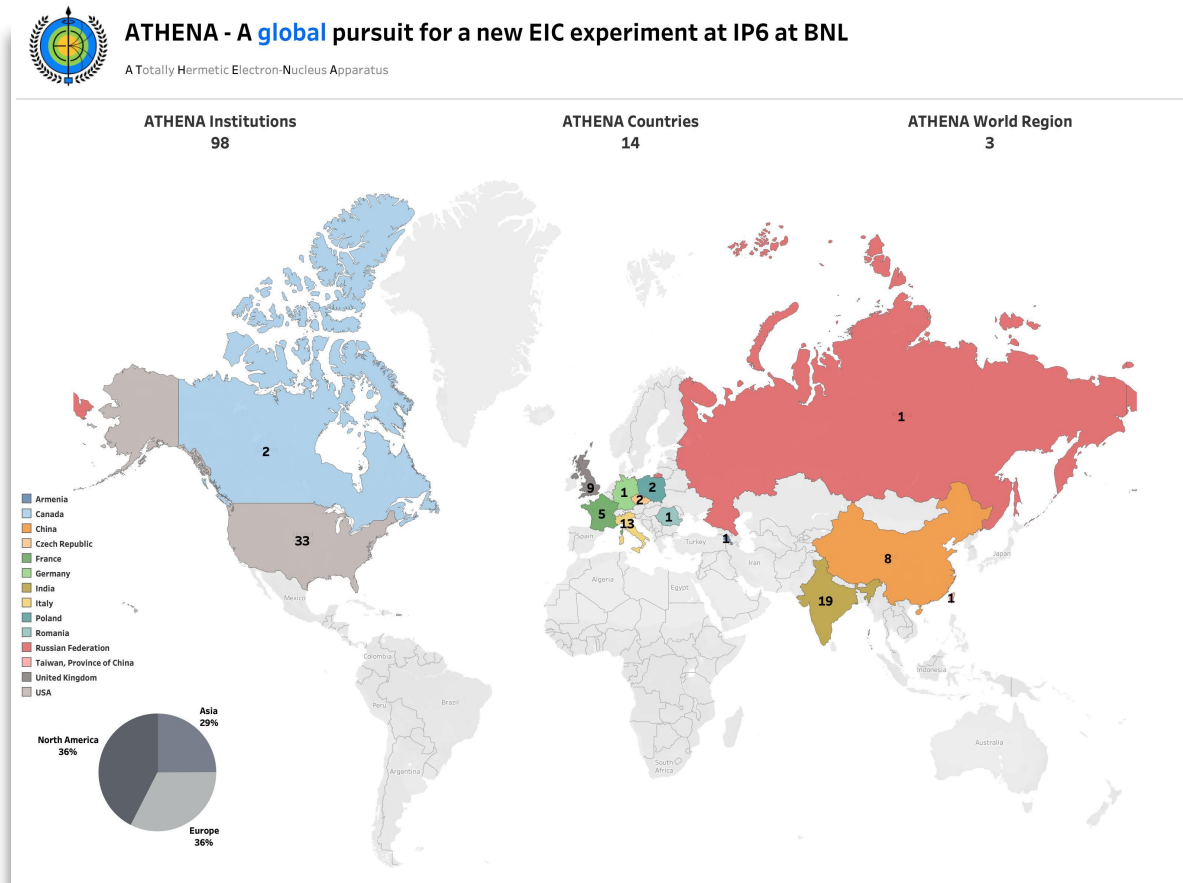
□ Figure 3: Detailed overview of the number of ATHENA inst. by country and world region





Chapter 4: Collaboration

- Figure 4: World map showing the coverage of EIC institutions by country with 98 institutions, 14 countries, and 3 world regions, with a fraction of institutions by world region of 36% in North America, 36% in Europe, and 29% in Asia



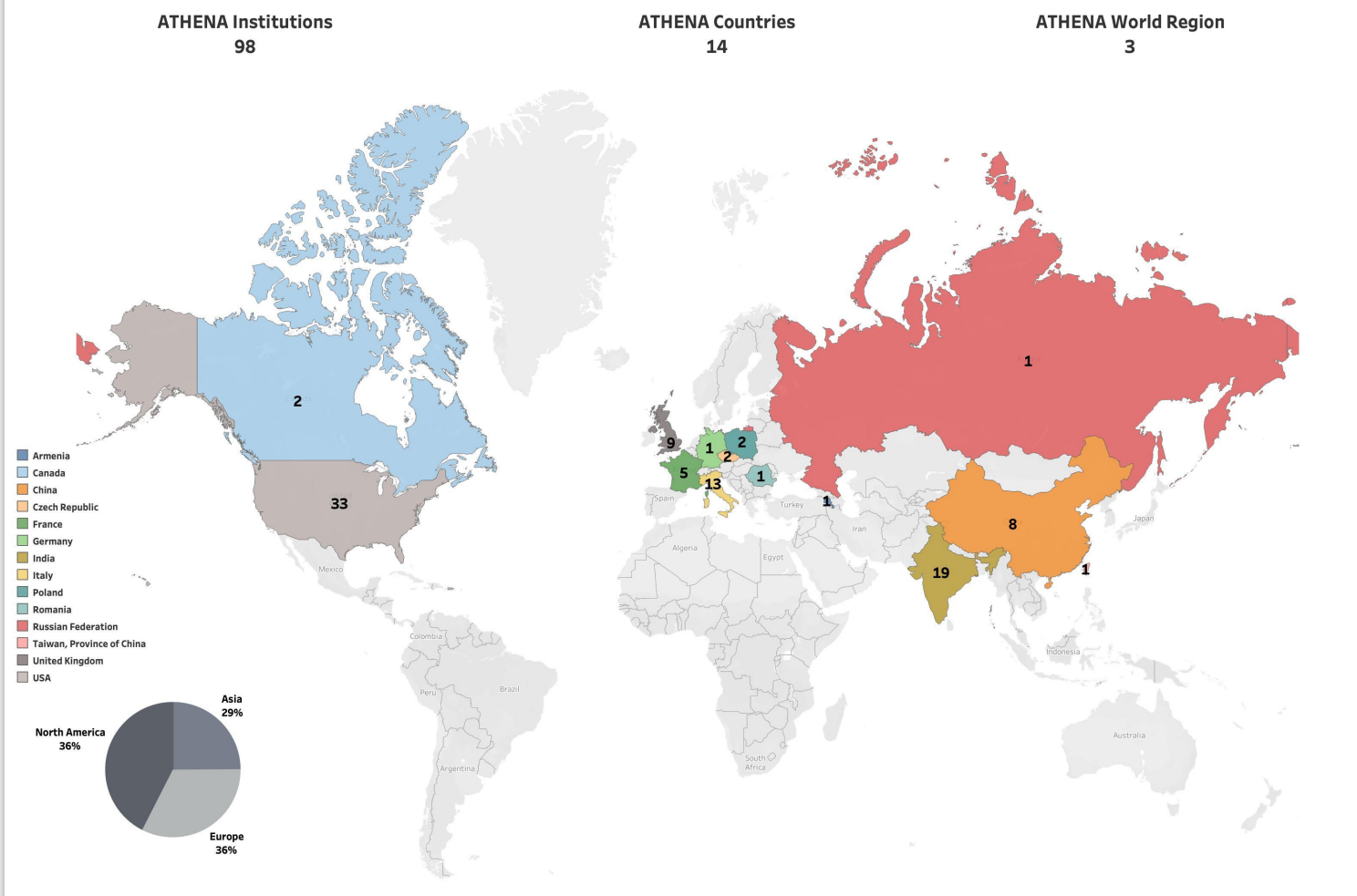


Chapter 4: Collaboration



ATHENA - A **global** pursuit for a new EIC experiment at IP6 at BNL

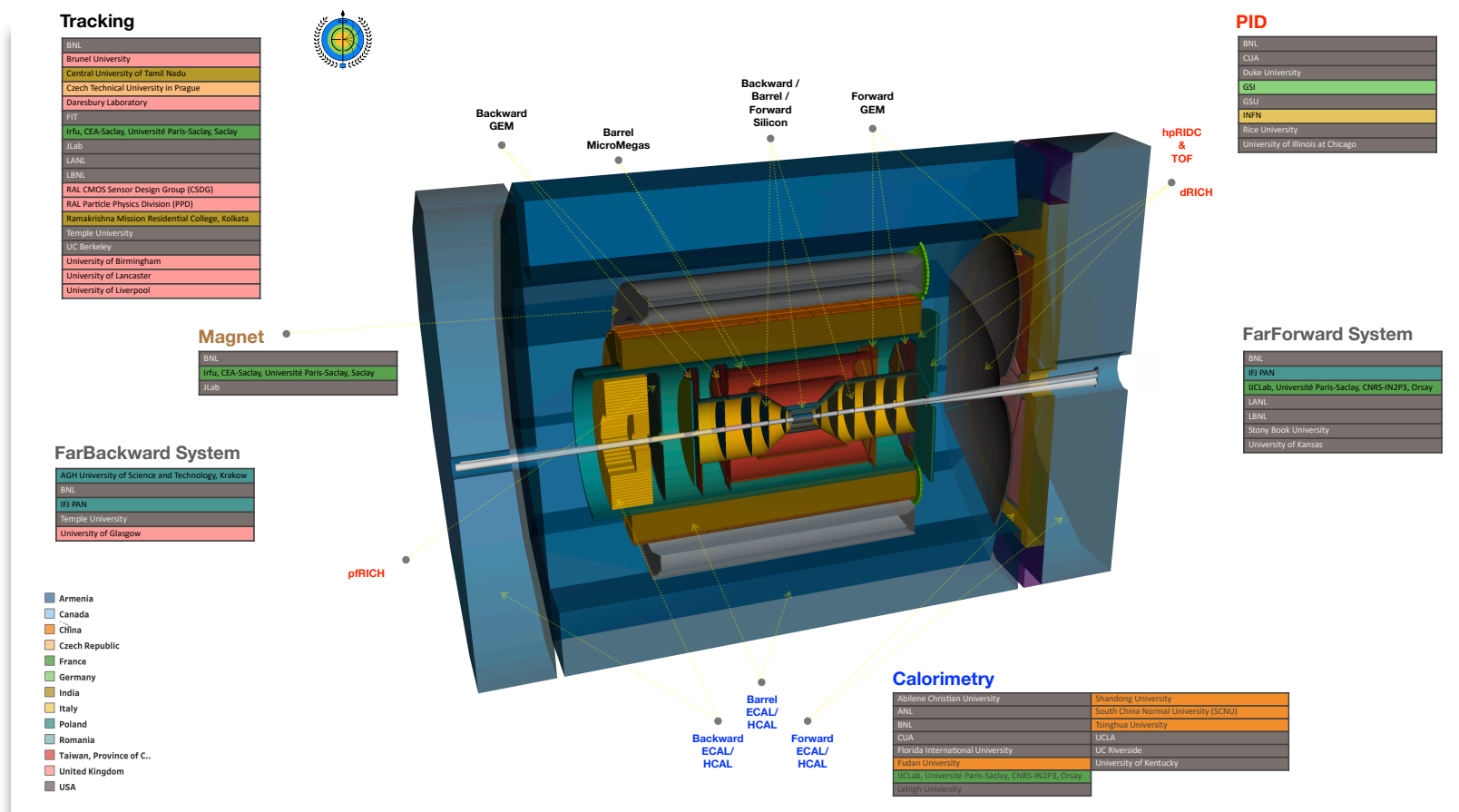
A Totally Hermetic Electron-Nucleus Apparatus





Chapter 4: Collaboration

- Figure 5: EIC GEANT4 detector layout, highlighting ATHENA sub-systems mapped to institutional interests



Chapter 4: Collaboration

Tracking

BNL
Brunel University
Central University of Tamil Nadu
Czech Technical University in Prague
Daresbury Laboratory
FIT
Irfu, CEA-Saclay, Université Paris-Saclay, Saclay
JLab
LANL
LBNL
RAL CMOS Sensor Design Group (CSDG)
RAL Particle Physics Division (PPD)
Ramakrishna Mission Residential College, Kolkata
Temple University
UC Berkeley
University of Birmingham
University of Lancaster
University of Liverpool



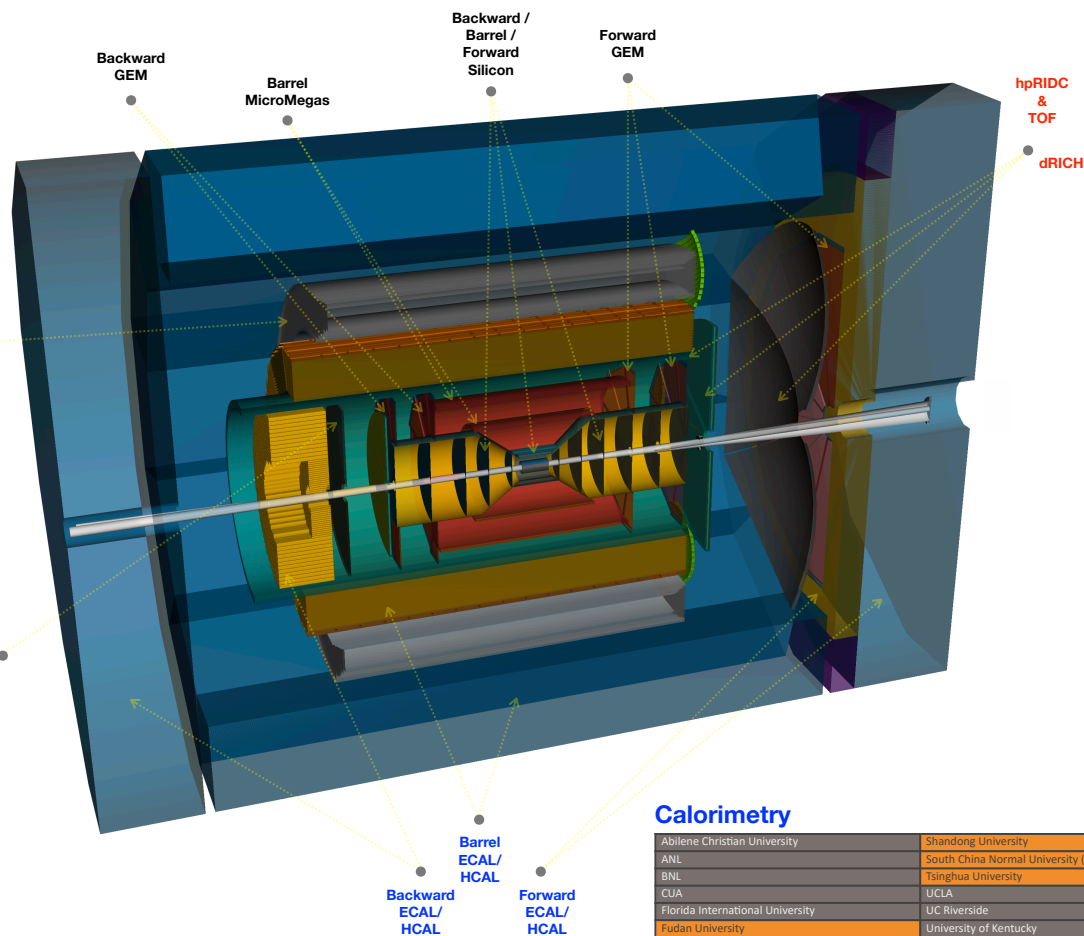
Magnet

BNL
Irfu, CEA-Saclay, Université Paris-Saclay, Saclay
JLab

FarBackward System

AGH University of Science and Technology, Krakow
BNL
IFJ PAN
Temple University
University of Glasgow

Armenia
Canada
China
Czech Republic
France
Germany
India
Italy
Poland
Romania
Taiwan, Province of C..
United Kingdom
USA



PID

BNL
CUA
Duke University
GSI
GSU
INFN
Rice University
University of Illinois at Chicago

FarForward System

BNL
IFJ PAN
UCLab, Université Paris-Saclay, CNRS-IN2P3, Orsay
LANL
LBNL
Stony Brook University
University of Kansas

Calorimetry

Abilene Christian University	Shandong University
ANL	South China Normal University (SCNU)
BNL	Tsinghua University
CUA	UCLA
Florida International University	UC Riverside
Fudan University	University of Kentucky
UCLab, Université Paris-Saclay, CNRS-IN2P3, Orsay	
Lehigh University	



Chapter 5: Costing

- ❑ Overview of current proposal draft:
 - Text is in final draft form
 - Number of pages 25/14 → Moving various figures to appendix / WIKI documentation
 - All basic figures / tables available!
 - Updates:
 - ❑ Updates from a few sub-systems not included yet → Final for next release!
 - ❑ R&D cost items not included yet → Final for next release!
 - ❑ Escalation only shown in posted proposal draft in draft form → Final for next release!



Summary and Next Steps

- ❑ Collaboration chapter is in final draft form: Text + figures → Please read and submit comments through google form!
- ❑ Costing: Actual costing effort has been finalized
- ❑ Costing chapter: Text is in final draft form
- ❑ Updates for next release:
 - Some sub-system updates
 - R&D
 - Moving several figures to appendix / WIKI page
- ❑ Please read carefully and submit comments!