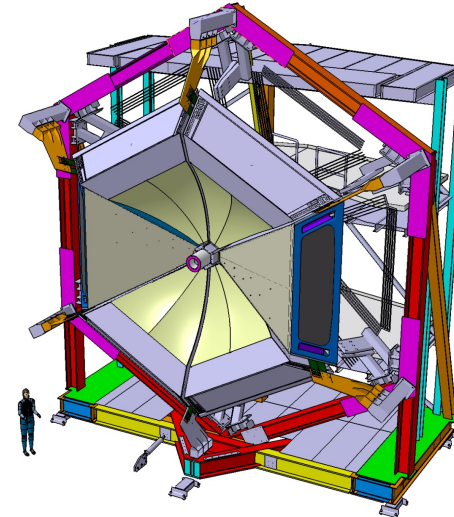


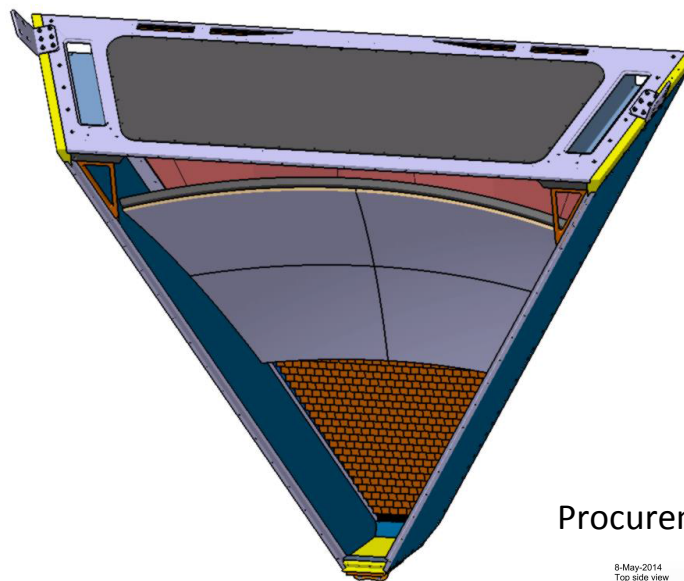
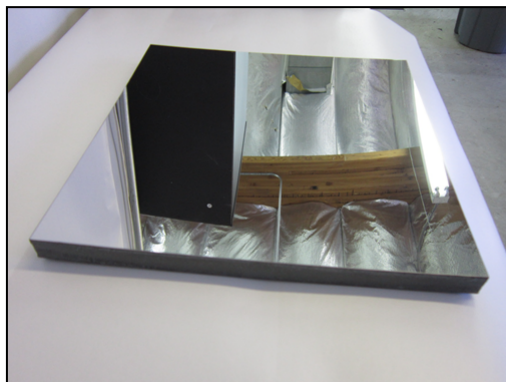
# CLAS12-RICH

1<sup>st</sup> sector construction started in September 2013

INFN(Italy), Jlab,  
Argonne National Lab, Duquesne University,  
Kyungpook National University (Republic of Korea),  
J. Gutenberg Universitat Mainz (Germany),  
Universidad Tecnica Federico Santa Maria (Chile),  
University of Connecticut, University of Glasgow (UK)



First mirror demos delivered

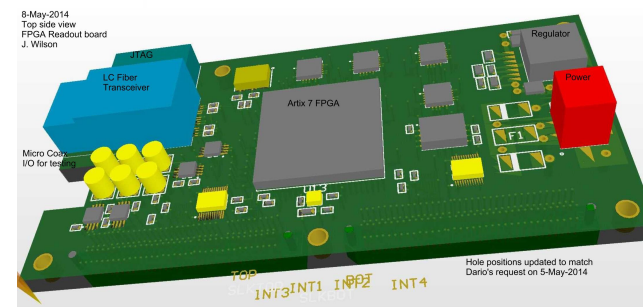


RICH Module mechanics ready for review by JLab engineers

First large aerogel tile (20x20 cm<sup>2</sup>) demos delivered



Procurement of F-E board prototypes initiated

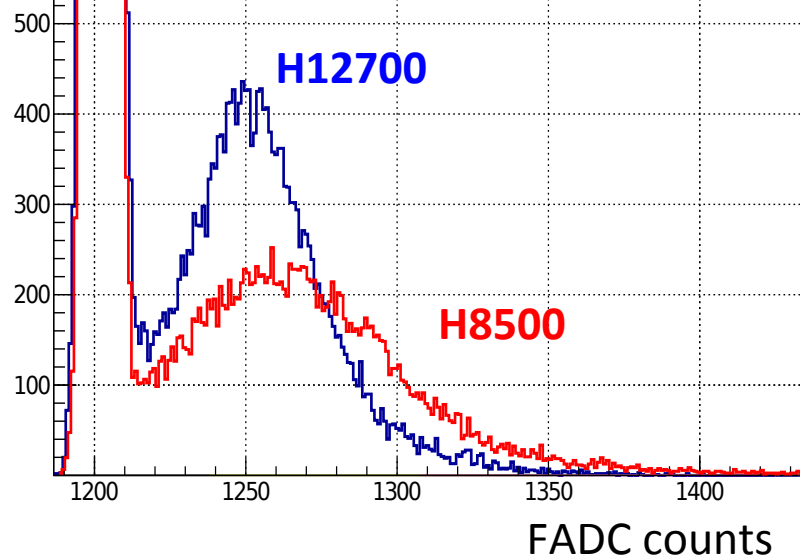


# MAPMT characterization

**90 Hamamatsu MAPMT out of 400 delivered and tested at Jlab**

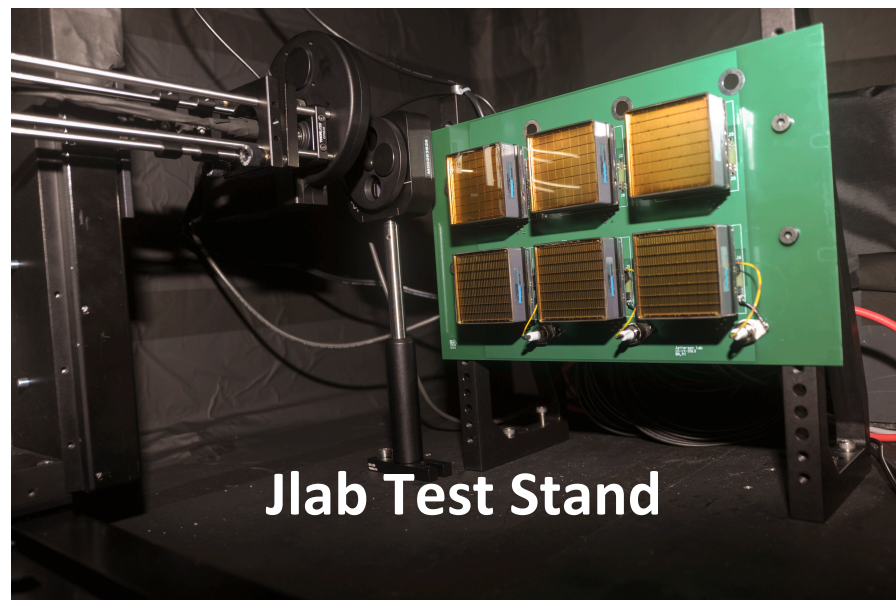
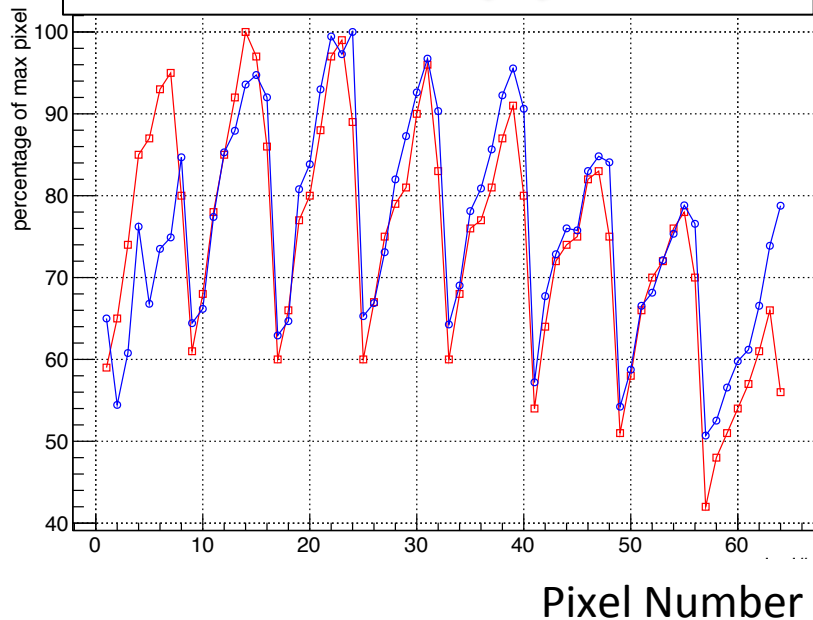
- 80 H8500
- 10 H12700 with enhanced single photoelectron spectrum

Single Photoelectron Spectrum

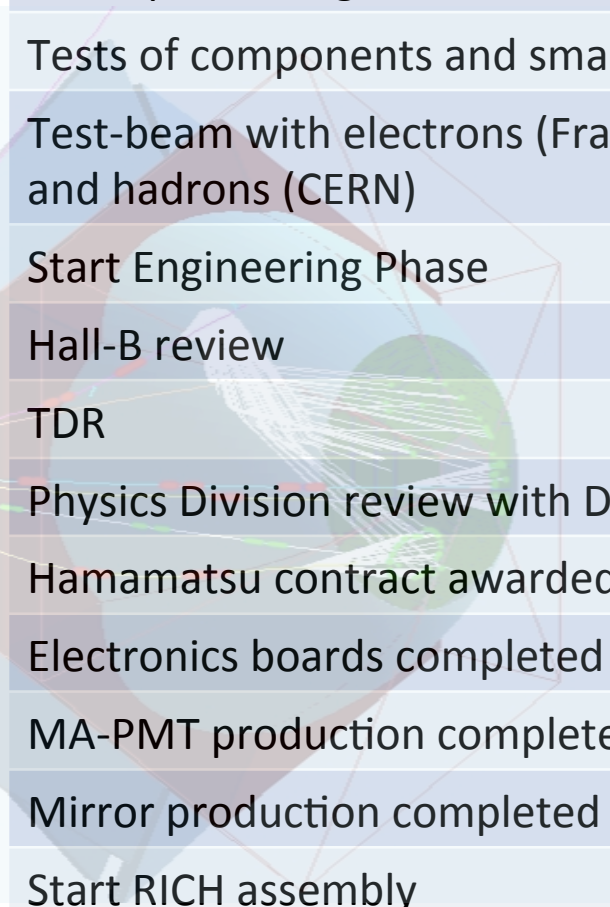


PMT Gain Comparison:

Hamamatsu ↔ Jlab



# RICH Construction Schedule



Milestone	Date
Concept of Design and Technology	2010
Tests of components and small prototype	2011
Test-beam with electrons (Frascati) and hadrons (CERN)	2012-2013
Start Engineering Phase	Feb. 2013
Hall-B review	June 2013
TDR	Aug. 2013
Physics Division review with DOE observers	Sep. 2013
Hamamatsu contract awarded	30 Sep. 2013
Electronics boards completed	July 2015
MA-PMT production completed	Dec. 2015
Mirror production completed	Sep. 2015
Start RICH assembly	Oct. 2016
Aerogel production completed	Dec. 2016
RICH project completed	June 2017