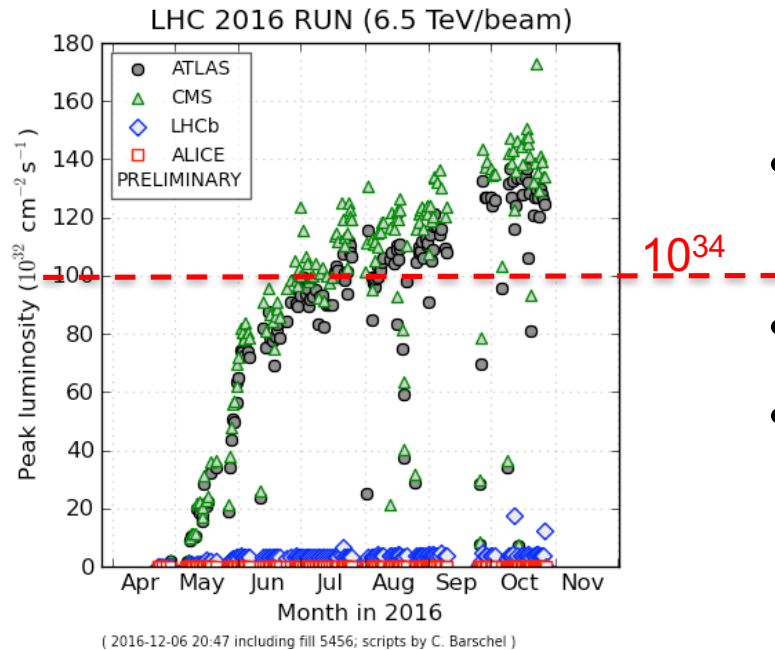


CMS Report

Zhen Hu  **Fermilab**
All Experimenters' Meeting
Jan 9, 2017

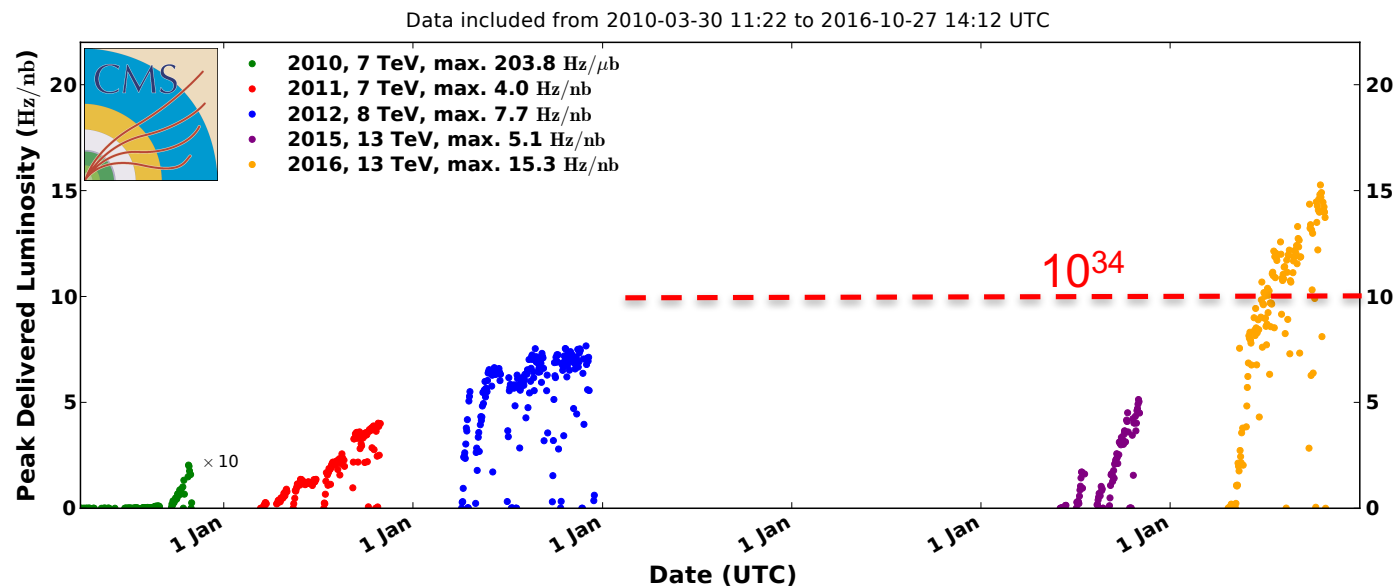


LHC Peak Lumi



- Peak lumi $> 10^{34}$ most of the time since July 2016
- Corresponding peak pileup was 45-54
- CMS was OK for 2016 Run

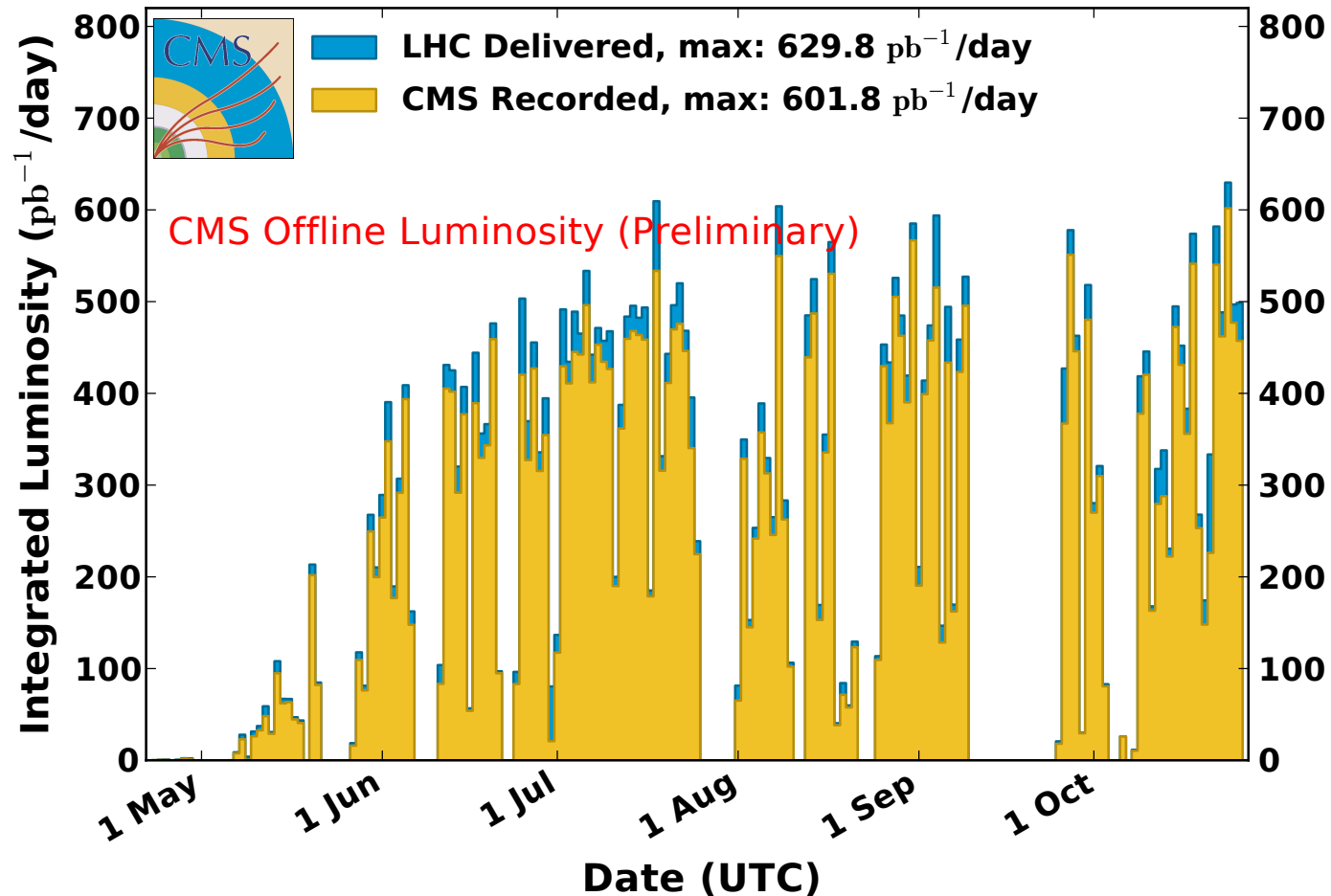
CMS Peak Luminosity Per Day, pp



CMS Integrated luminosity Per Day

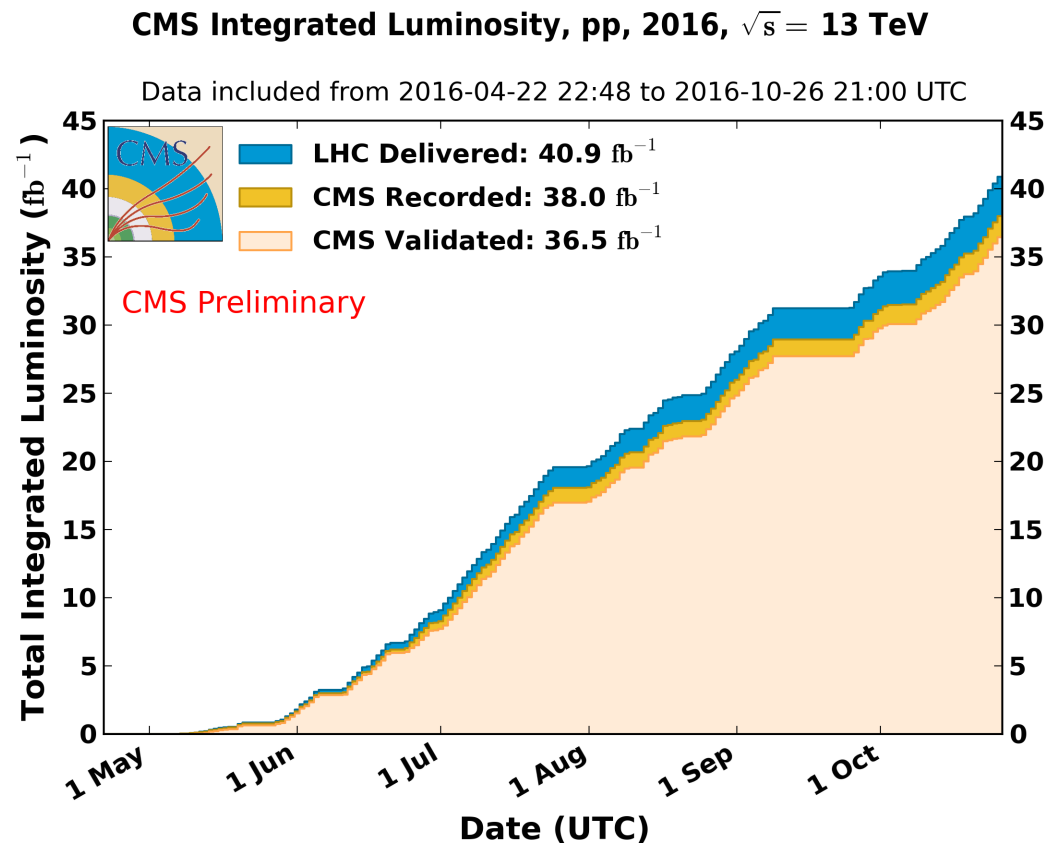
CMS Integrated Luminosity Per Day, pp, 2016, $\sqrt{s} = 13$ TeV

Data included from 2016-04-22 22:48 to 2016-10-27 14:12 UTC



CMS Certified Data: $\sim 37/\text{fb}$

- Complete pp Collisions 16 runs recorded for physics analysis are included



Data certification
efficiency:
96%

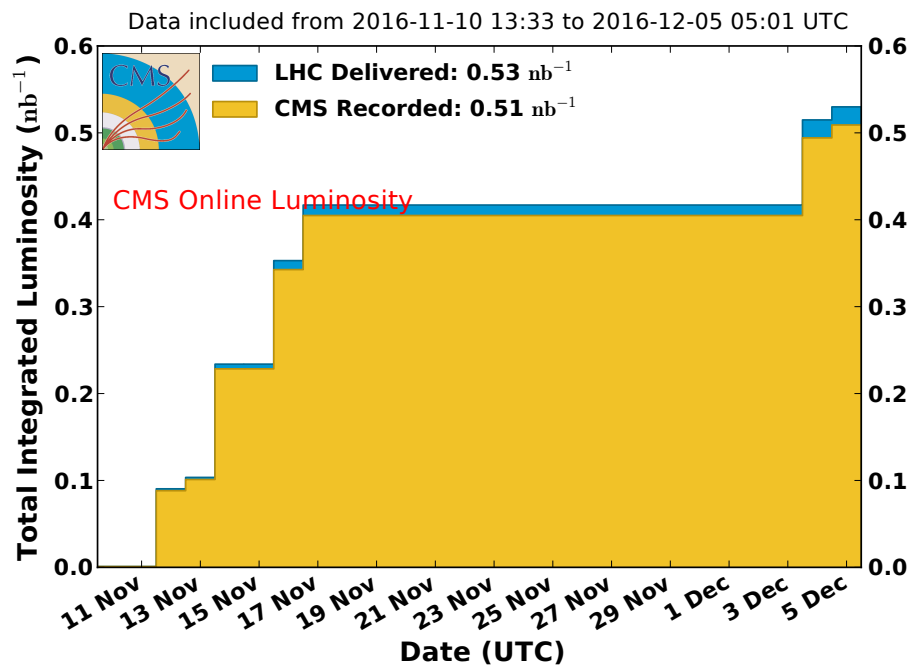
Luminosity: (Data certification page)
<https://twiki.cern.ch/twiki/bin/viewauth/CMS/DataQuality>



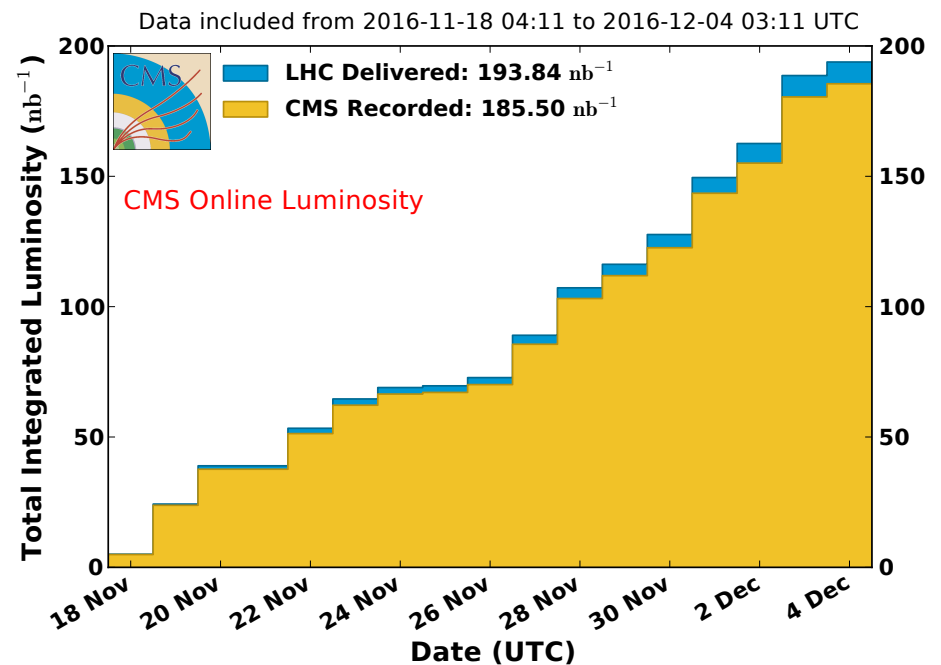
Heavy Ion Run 2016

- Successful pPb run in Nov-Dec. 2016, with data recording efficiency of $\sim 97\%$, of which $\sim 99\%$ of data are certified as “good quality”

CMS Integrated Luminosity, pPb, 2016, $\sqrt{s} = 5.02$ TeV/nucleon

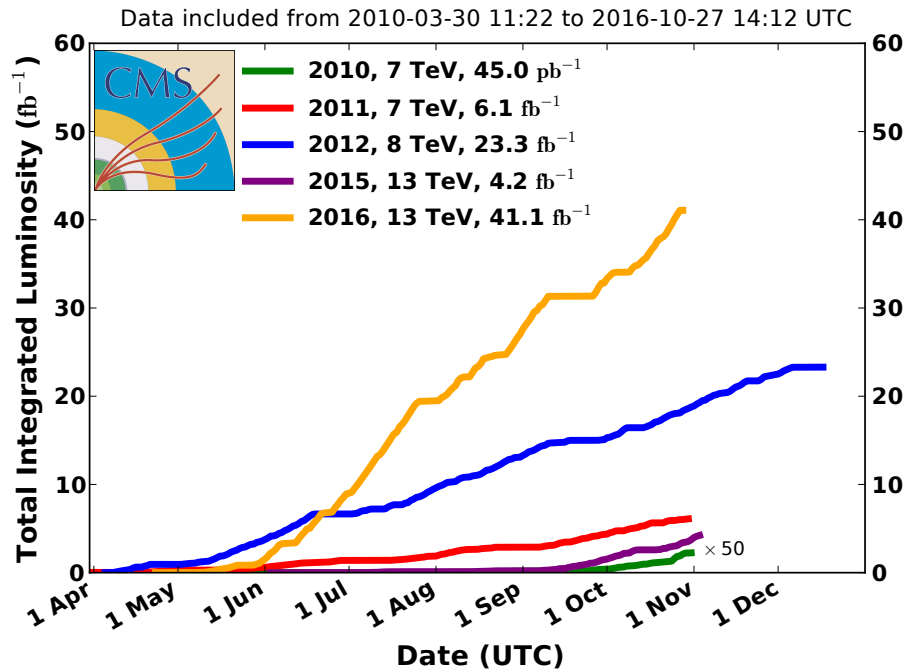


CMS Integrated Luminosity, pPb, 2016, $\sqrt{s} = 8.16$ TeV/nucleon

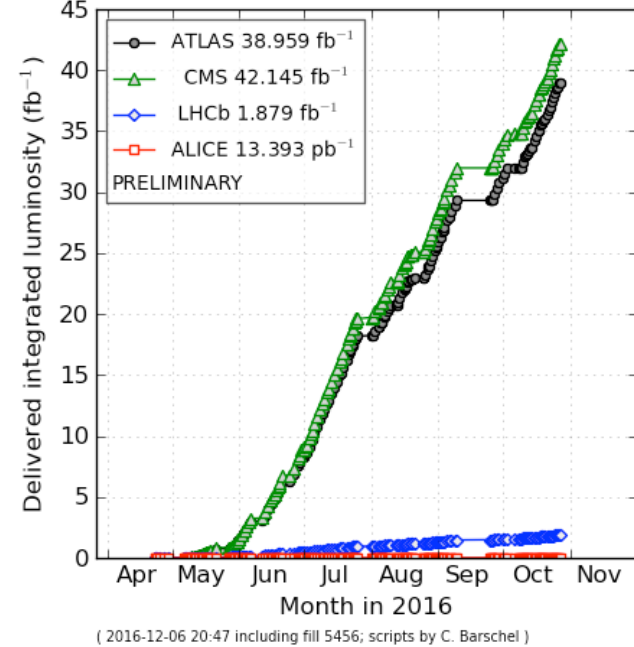


Other Luminosity Plots

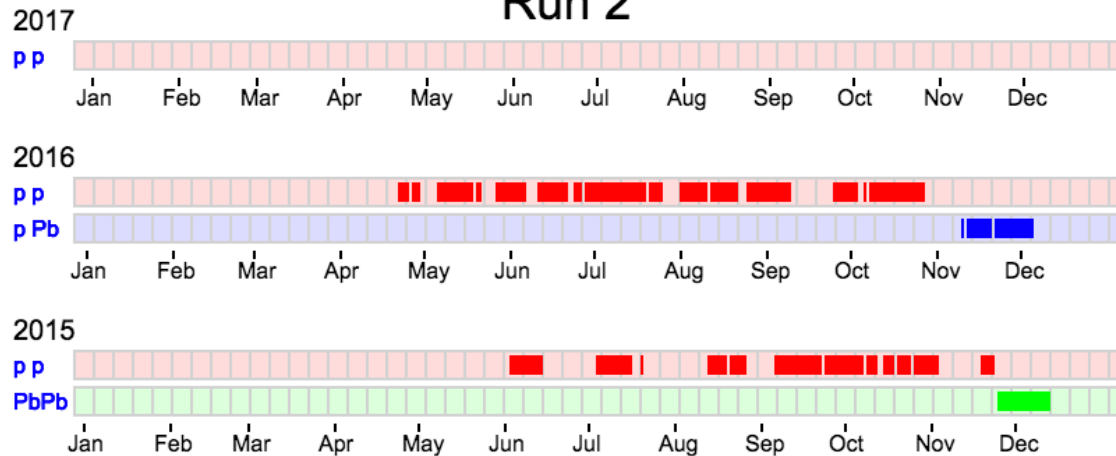
CMS Integrated Luminosity, pp



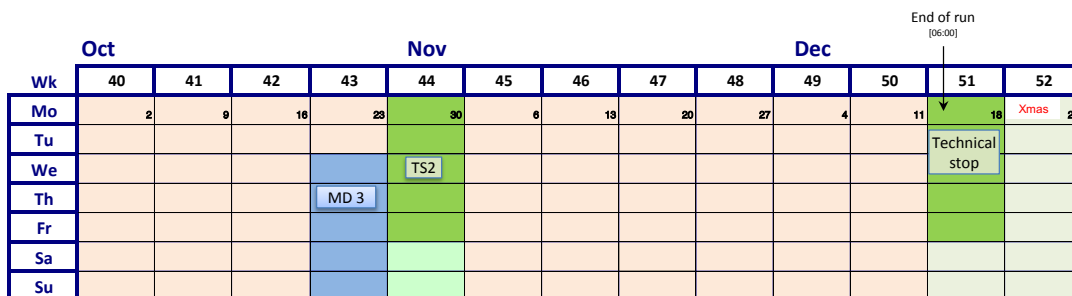
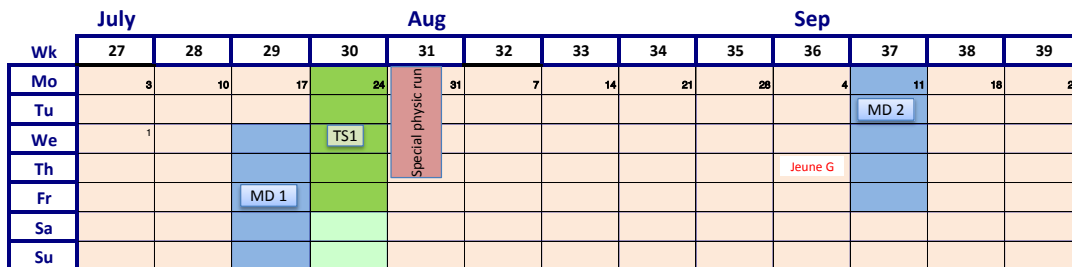
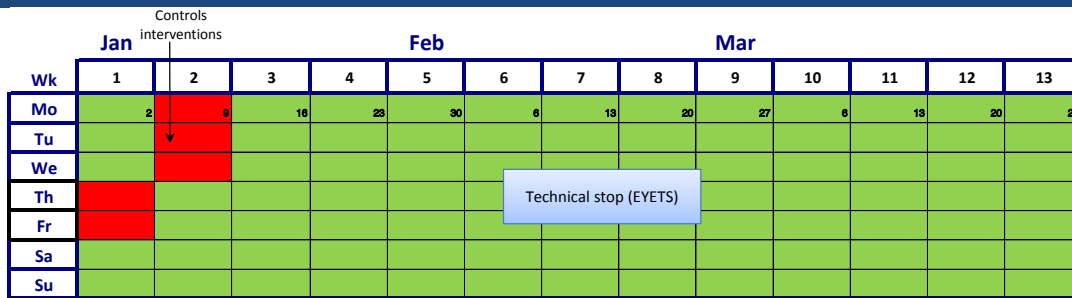
LHC 2016 RUN (6.5 TeV/beam)



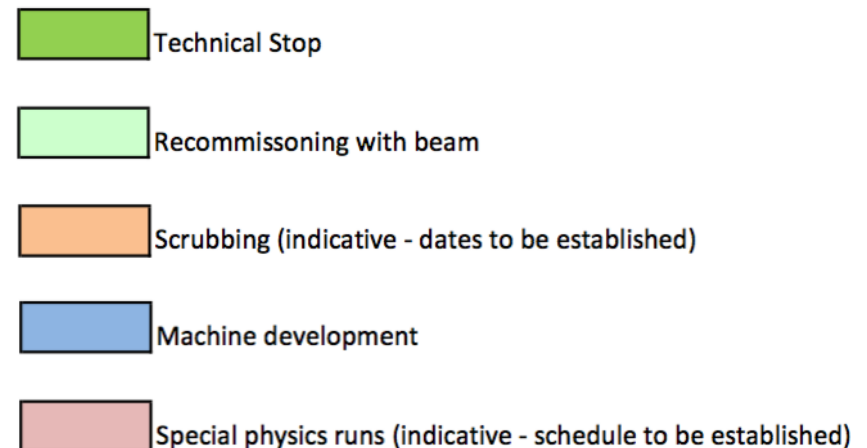
Run 2



LHC Schedule 2017 (Draft)



- EYETS(Extended Year End Technical Stop) work coming up
 - HF installation going on
 - FPIX at CERN, Pixel to be installed
 - HCAL HE frontend decision next week if install
- LHC running plan to be discussed and confirmed on the annual LHC performance workshop in Chamonix (end of Jan.)



<https://espace.cern.ch/be-dep/BE/DepartmentalDocuments/BE/>



XVI CMS Data Analysis School

- This week: annual CMSDAS at FNAL LPC
 - A school designed to teach CMS students how to perform data analysis with CMS software
 - <https://indico.cern.ch/event/578454/>

Group photo taken at 10:30 AM this morning



Over 100 registered participants come to Fermilab for CMSDAS this week

