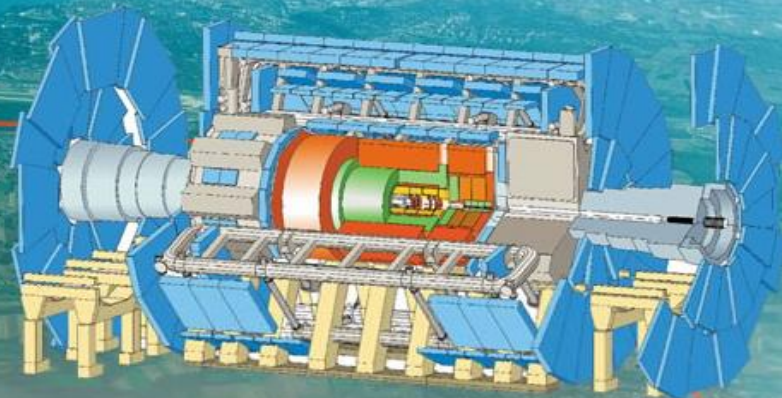
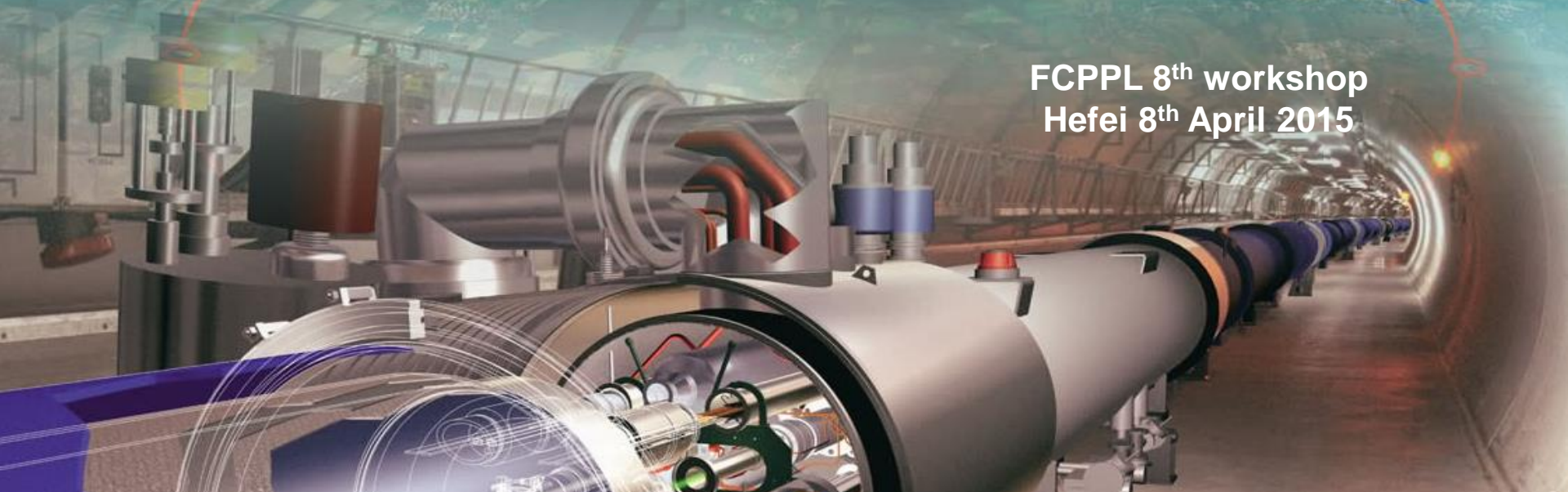


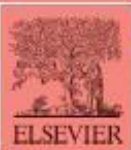
ATLAS FCPPL Projects session Introduction

Shan JIN (IHEP) / Emmanuel MONNIER (CPPM)



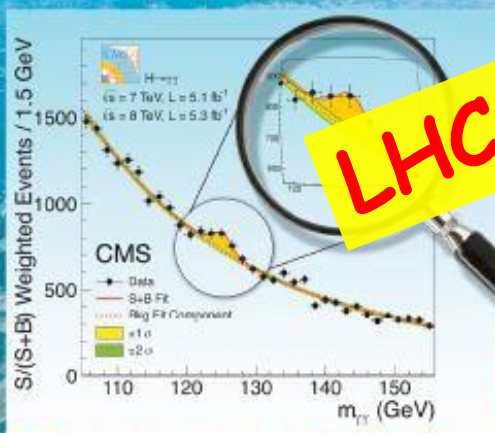
FCPPL 8th workshop
Hefei 8th April 2015





4/7/12 Higgs boson discovered!
 $H \rightarrow \gamma\gamma$, $H \rightarrow ZZ \rightarrow 4l$, $H \rightarrow WW \rightarrow 2l2\nu$

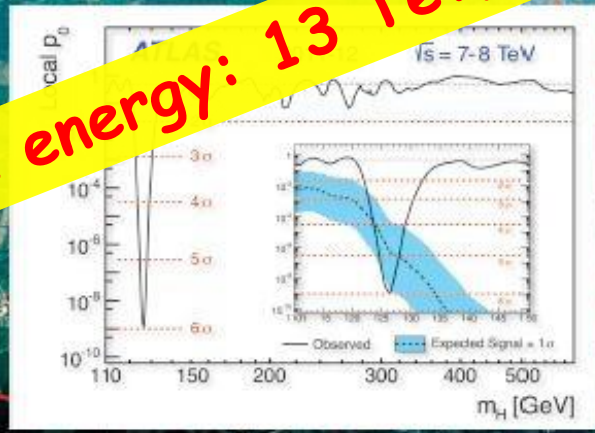
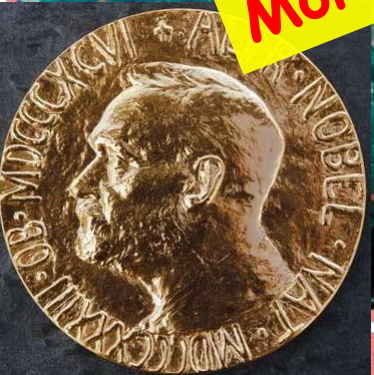
PHYSICS LETTERS B



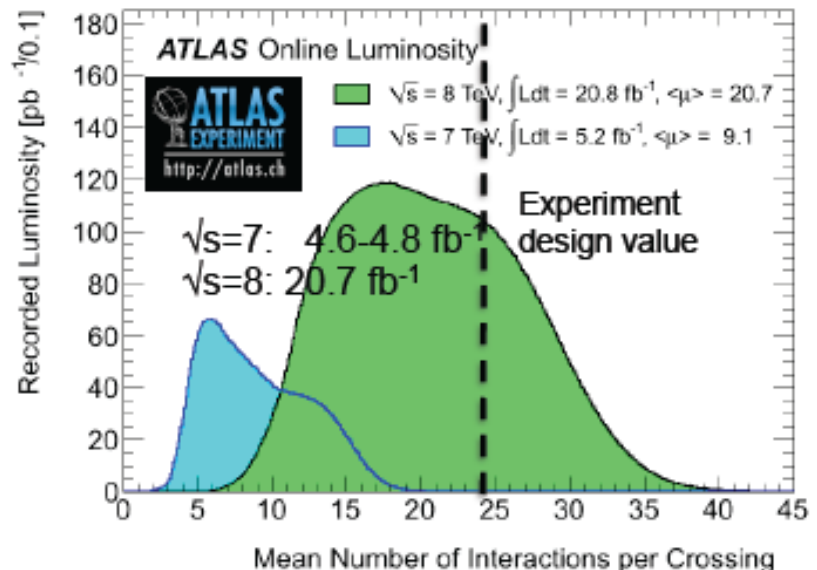
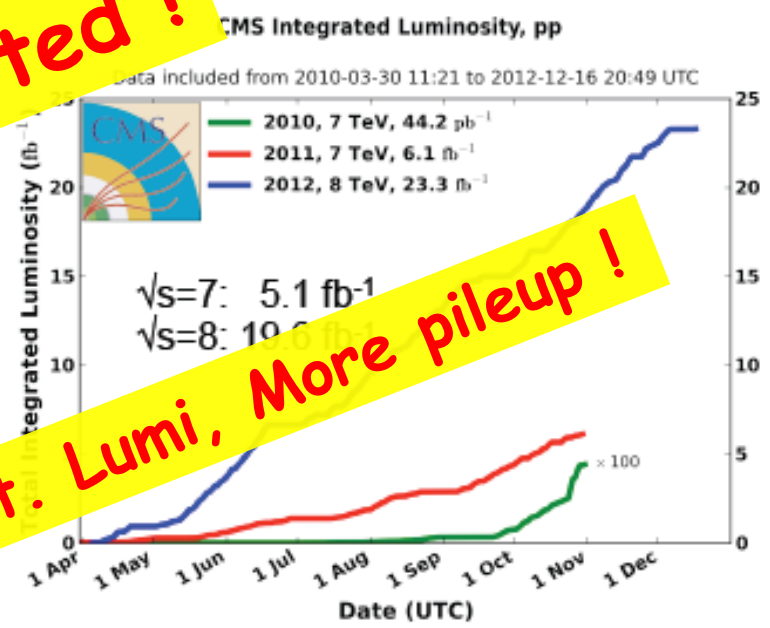
LHC Run 2 has started!

More energy: 13 TeV, More int. Lumi, More pileup!

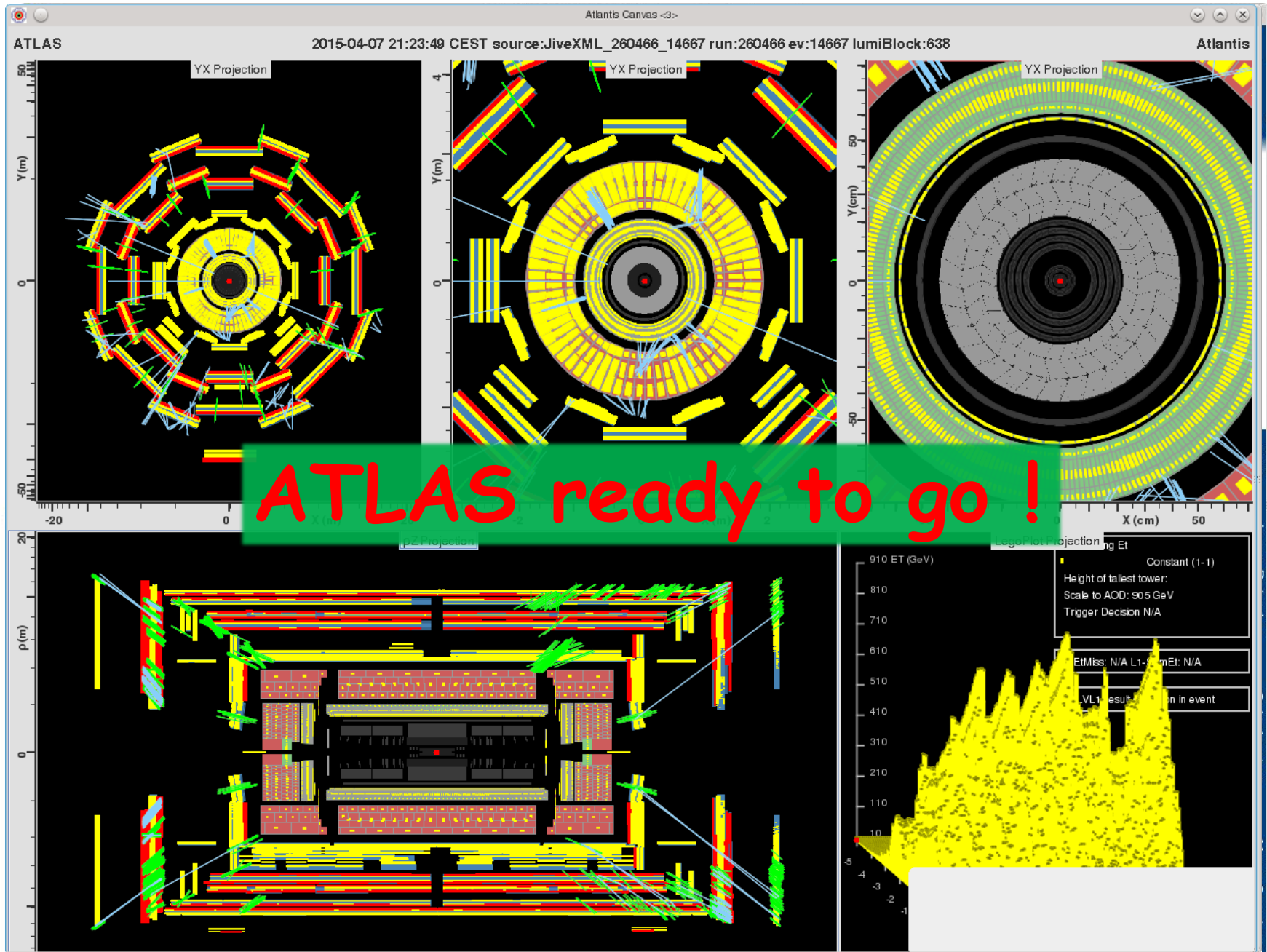
8/10/12

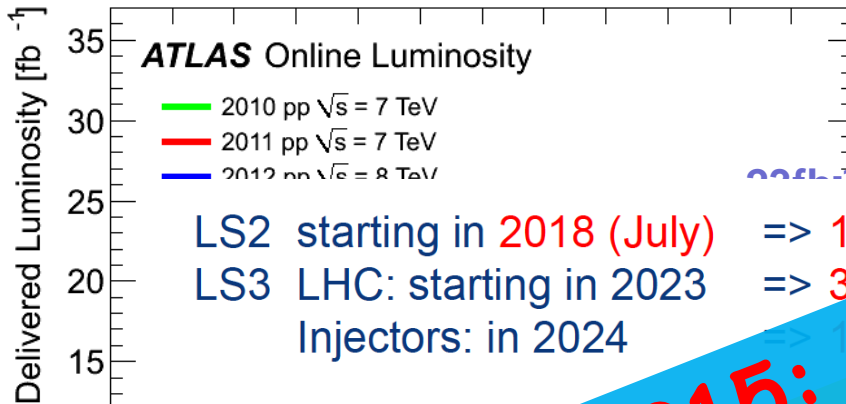


Now "LHC-Run1" data analyzed:
2011~5fb⁻¹@7TeV Outstanding
2012~23fb⁻¹@8TeV LHC!

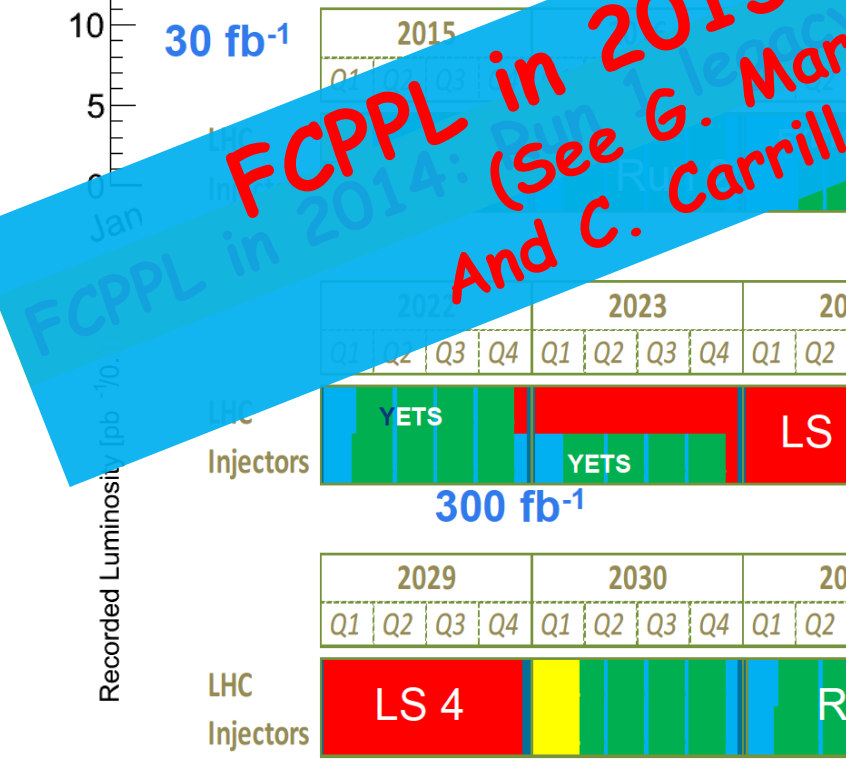


First LHC Run2 beam splashes in ATLAS





Subdetector	Number of Channels	Uptime (%)
Pixels	80 M	99.9%
SCT Silicon Strips	6 M	99.9%
TRT Transition	1 M	97.5%



(Extended) Year End Technical Stop: (E)YETS

Mean Number of Interactions per Crossing

9-Apr-15

E. Mc

FCPPL in 2015: Run 2 data analysis
 (See G. Marchiori highlight talk
 And C. Carrillo ATLAS/CMS review)

Many legacy «Run 1» data (Higgs, Susy, SM analysis...) in which FCPPL cooperation has strongly contributed. See today's talks as well as winter conference slides and related conf note for details of ATLAS new results.

All good for physics: 95.8%

Luminosity weighted relative detector uptime and good quality data delivery during 2012 stable beams in pp collisions at $\sqrt{s}=8$ TeV between April 4th and December 6th (in %) – corresponding to 21.6 fb⁻¹ of recorded data.

ACC(IHEP/NJU/SDU/USTC)-IN2P3(CPPM/LAL/LPNHE/LPSC)

- Very strong cooperation program between the Atlas Chinese Cluster and CPPM, LAL, LPNHE, LPSC since several years:
 - Higgs, Susy studies (through $\gamma\gamma$, $Z\gamma$, WW final states and also lepton/jet/bjet/top final states)
(see Y. Li, Prof. X. Zhuang talks)
 - Multi-boson studies (see J. Gao talk)
 - Top properties (see Prof. C. Zhu talk)
 - Performance studies (E/gamma, B tag, Trigger, Calorimeter)
 - Silicon detector R&D (see P. Pangaud talk in R&D session)
 - Numerous presentation in Atlas meetings, conferences as well as in internal, public/conf notes and publications.
 - Many senior physicists visits (France and China) with continuous cooperation work between ACC physicist and IN2P3 physicists
 - Several co-PhD thesis defended recently and more to come in 2015: Y. Li, J. Gao, L. Jian ... (Co-PhDs are > 1/3 of LIA stud.)

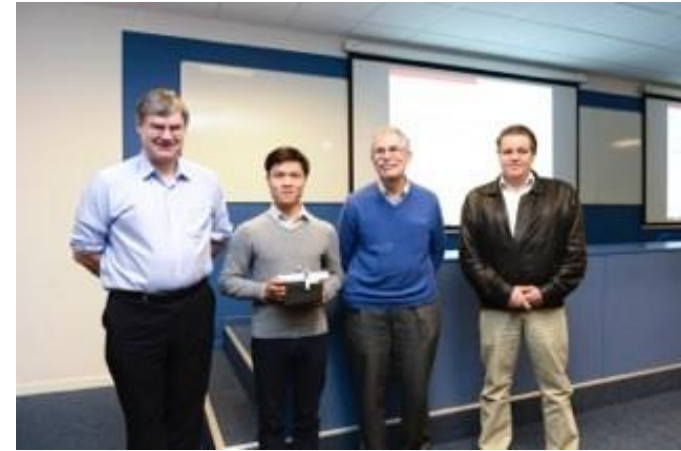
ATLAS ACC-IN2P3 heavily involved in preparing Run2 data analyses in 2014-2015 and finishing Run 1 legacy analyses.

- **Co-PhD :**

- **K. Liu (LPNHE/USTC)**

USTC/FCPPL funded (06/2014)

ATLAS PhD Award, now Postdoc at CPPM



- **Y. Li (LAL/Nanjing U.) CSC funded (04/2015)**

- **M. Wu (LPSC) CSC funded (started 09/12)**

- **J. Gao (CPPM/USTC) USTC/FCPPL/Eiffel funded (started 09/12)**

- **R. Zhang (CPPM/USTC) USTC/FCPPL funded (started 09/14)**

- **W. Chao (CPPM/SDU) CSC Cai Yuanpei funded (started 09/14)**

- **Strong SLHC Silicon detector R&D cooperation program ongoing, with weekly meetings, scientists visits. J. Liu (SDU/CPPM), co-phd started 09/13 SDU/FCPPL/Eiffel funded**

- **Need to strengthen manpower for strong ATLAS Run 2 analysis and R&D for ATLAS upgrade and future detectors.**

谢谢！
Merci !
Thank
You !

	Review of the ATLAS Silicon Detector R&D project work	<i>M. Patrick PANGAUD</i>
	<i>University of Science and Technology of China</i>	13:30 - 13:55
14:00	ATLAS/CMS selected Higgs results and Run 2 perspective	<i>Camilo Andres CARRILLO MONTOYA</i>
	<i>University of Science and Technology of China</i>	13:55 - 14:25
ATLAS	Atlas projects Introduction	<i>Emmanuel MONNIER</i>
	<i>University of Science and Technology of China</i>	14:25 - 14:40
	Susy searches	<i>Xuai ZHUANG</i>
	<i>University of Science and Technology of China</i>	14:40 - 15:05
15:00	Standard Model multiboson cross section measurements	<i>Jun GAO</i>
	<i>University of Science and Technology of China</i>	15:05 - 15:30
	Observation of the Higgs boson and measurement of its properties in the $H \rightarrow WW^* \rightarrow l\nu l\nu$ channel	<i>Yichen LI</i>
16:00	Polarization studies in top physics	<i>Prof. Chengguang ZHU</i>
	<i>University of Science and Technology of China</i>	15:55 - 16:20
	coffee	
	<i>University of Science and Technology of China</i>	16:20 - 16:40
17:00	Status of WLCG FCPPL project	<i>Gang CHEN</i>
	<i>University of Science and Technology of China</i>	16:40 - 17:10
CMS	CMS projects introduction	<i>Susan Shotkin GASCON-SHOTKIN</i>
	<i>University of Science and Technology of China</i>	17:10 - 17:25
	The $h(125 \text{ GeV})$ as the h_2 of the NMSSM and prospects for h_1 detection in the diphoton mode	<i>Jiawei FAN</i>
18:00	WH resonance search at CMS	<i>Qiang LI</i>
	<i>University of Science and Technology of China</i>	17:50 - 18:15