

## Schedule of 7<sup>th</sup> School on LHC Physics (06 – 17 August 2018)

TIME (PST)	Mon (06 <sup>th</sup> Aug)	Tue (07 <sup>th</sup> Aug )	Wed (08 <sup>th</sup> Aug )	Thu (09 <sup>th</sup> Aug )	Fri (10 <sup>th</sup> Aug )	Sat (11 <sup>th</sup> Aug )
09:20 – 10:10	<b>Registration</b> 08:30 – 9:20  <b>Welcome Session</b> 9:20 – 10:10	Standard Model of PP - II (Faisal Akram)	<b>Pakistan-CERN Collaboration Role of PAEC</b>	<b>HEP in Pakistan and Role of HEC</b>	Grid Computing at CMS (Giuseppe Bagliesi)	Egamma and jet+MET performance at CMS - II ( Livia Soffi)
10:10 – 11:00	Overview of the LHC physics (Hafeez Hoorani)	Overview of Statistical techniques in HEP - I (Youngjoon Kwon)	Statistical techniques in HEP - II (Youngjoon Kwon)		Status and upgrade of the CMS Muon Spectrometer (Anna Colaleo)	v Introduction to Grand Unification Theory - I (Mansoor ur Rehman)
11:00 – 11:20	<b>Tea</b>					
11:20 – 12:10	Overview of Physics with CMS (Ashfaq Ahmad)	CMS Tracker Detector (Ashfaq Ahmad)	Introduction to Particle Physics (Ashfaq Ahmad)	Statistical techniques in HEP - III (Youngjoon Kwon)	QCD - III (Bilal Masud)	MC and PDF at LHC - I (Rachid Mazini)
12:10 – 13:00	Overview of the Standard Model of PP - I (Faisal Akram)	CMS GEM Detectors (Saleh Muhammad)	Egamma and jet+MET performance at CMS ( Livia Soffi)	QCD - II (Bilal Masud)	Egamma and jet+MET performance at CMS - I (Livia Soffi)	TOP Quark Physics at LHC (Muhammad Waqas)
13:00 – 14:00	<b>Lunch</b>					
14:00 – 14:50	Overview of QCD (Bilal Masud)	RPC's at CMS Detector (Irfan Asghar)	QCD - I (Bilal Masud)	SUSY - I (Rizwan Khalid)	SUSY - II (Rizwan Khalid)	Tutorial-III ROOT-I (Muhammad Waqas)
14:50 – 15:40	Discussion	Introduction to detector readout and Frontend electronics (Waqar Ahmad)	Standard Model of PP - III (Faisal Akram)	Tutorial-I Introduction to C++ - I (Adeel-ur-Rehman)	Tutorial-II Introduction to C++ - II, (Adeel-ur-Rehman)	Tutorial-IV Introduction to python (Adeel-ur-Rehman)
15:40 – 16:10	<b>Tea</b>					
16:10 – 17:00	<b>Discussion Sessions (Corresponding Group Leader)</b>					

TIME (PST)	Sun (12 <sup>th</sup> Aug)	Mon (13 <sup>th</sup> Aug)	Tue (14 <sup>th</sup> Aug)	Wed (15 <sup>th</sup> Aug)	Thu (16 <sup>th</sup> Aug)	Fri (17 <sup>th</sup> Aug)
09:20 – 10:10	<b>Excursion</b>	Di-boson physics at CMS - I ( Matthias Mozer )	<b>Holiday</b>	<b>Public Lecture from 9:40 – 11:00</b>  Hadron Colliders Physics – historical perspective to Future ( Roberto Carlin)	Di-boson physics at CMS - III ( Matthias Mozer)	Students Presentations
10:10 – 11:00		MC and PDF at LHC - II (Rachid Mazini)			Physics of Gaseous Detectors - II (Alexei Safonov)	
11:00 – 11:20		<b>Tea</b>		<b>Tea</b>		
11:20 – 12:10		Egamma and Jet+MET performance at CMS - III ( Livia Soffi)		Di-boson physics at CMS - II (Matthias Mozer )	LHC Phenomenology - II (Shabbar Raza)	Concluding Session
12:10 – 13:00		Introduction to Grand Unification Theory - II (Mansoor ur Rehman)		Physics of Gaseous Detectors - I (Alexei Safonov)	Black hole Physics at the LHC (Aatif Imtiaz Butt)	
13:00 – 14:00		<b>Lunch</b>		<b>Lunch</b>		
14:00 – 14:50		Tutorial-V ROOT-II (Muhammad Waqas)		MC and PDF at LHC - III (Rachid Mazini)	Tutorial-VIII  CMS data analysis (Shoaib +Ahmad)	Departure
14:50 – 15:40		Tutorial-VI CMS data analysis (Rachid + Shoaib + Ahmad)		Tutorial-VII CMS data analysis (Shoaib +Ahmad)	Tutorial-IX CMS data analysis (Shoaib +Ahmad)	
15:40 – 16:10		<b>Tea</b>		<b>Tea</b>		
16:10 – 17:00		Discussion (Corresponding Group Leader)		<b>Conference Dinner</b>		Discussion (Corresponding Group Leader)