



ATLAS Standard Model Workshop 2018

5th – 7th of September 2019, London

Goals of the Workshop

- Summarize the ongoing efforts within the SM group with a focus on bottlenecks towards full Run-2 efforts
 - Keep in mind that most (if not all) 2015/16 papers will be followed by comprehensive full Run-2 papers
- How can we get more efficient?
- How can we improve co-operations with search-groups and leveraging synergies (\leq management phrase ☺)?
- How to publish our measurements in the best possible way for theoreticians?
- Where do we need more manpower?
...
- Get together as a group



Some Facts and Figures

- We lost the place of the group with the most papers to the Exotics group
 - but should be the leading group again in one year from now
 - We made huge progress on the 2015/16 campaign
 - We reduced the time spent in the EB-phase and SM-review
- We have 380 people on SCAB!
 - Lowest number since years
 - We need to attract new people to cover all interesting analyses
- We need your feedback (<5 replies)?
 - How to improve the SM group?
 - Questions to the Theory-Panel?



Workshop Schedule and Organization

- The workshop program is very packed
 - Please stay in time with your talks, so that we have enough time for discussions
 - Make use of the theory panel discussion to address more “general” questions
 - Please come in time
- Last-minute changes will be announced at the beginning of the sessions and on the workshop Indico page
- We have two Indico pages
 - One public (without slides)
 - One ATLAS private (with slides)



Time-Table: Wednesday (Experiment)

WEDNESDAY, 5 SEPTEMBER

10:30 → 10:45	Welcome to London	15m	Peoples Palace	
10:45 → 11:45	Experimental Session 1: SoftQCD and Diffractive Physics Conveners: Rafal Staszewski (IFJ PAN Cracow (PL)), Sarka Todorova (Centre National de la Recherche Scientifique (FR))		Peoples Palace	
10:45	Diffraction studies with ALFA/AFP proton tag (15+5) Speaker: Mr James Kendrick (University of Birmingham (GB))	20m		
11:05	Electroweak studies with AFP tagging (15+5) Speaker: Rafal Staszewski (IFJ PAN Cracow (PL))	20m		
11:25	MinBias and Underlying Event studies (15+5) Speaker: Deepak Kar (University of the Witwatersrand (ZA))	20m		
11:45 → 12:00	Tea break	15m	Peoples Palace	
12:00 → 13:00	Experimental Session 2: Jets and Photons Conveners: Ben Nachman (University of California Berkeley (US)), Javier Llorente Merino (Chinese Academy of Sciences (CN))		Peoples Palace	
12:00	Jets and Jet-substructure Measurements (25+5) Speaker: Jennifer Kathryn Roloff (Harvard University (US))	30m		
12:30	Testing pQCD with photons Speaker: Ana Rosario Cueto Gomez (Universidad Autonoma de Madrid (ES))	30m		
13:00 → 14:00	Lunch Break	1h	Peoples Palace	
14:00 → 15:00	Experimental Session 3: W,Z Physics Conveners: Fabrice Balli (Université Paris Saclay (FR)), Valentina Cairo (The State University of New York SUNY (US))		Peoples Palace	
14:00	What is published since the last SM workshop Speaker: Evelin Meoni (Universita della Calabria e INFN (IT))	20m		
14:20	Progress report on the low-mu data-set Speaker: Ludovica Aperi Bella (CERN)	20m		
14:40	Ongoing projects in the W,Z group Speaker: Aaron James Armbruster (CERN)	20m		
15:00 → 16:00	Experimental Session 4: Electroweak Physics Conveners: Bing Li (University of Michigan (US)), Lalin Xu (Brookhaven National Laboratory (US))		Peoples Palace	
15:00	Standard Model quadratic gauge couplings in action (VBS and tribosons) Speaker: Rustem Osipov (University of Science and Technology of China)	20m		
15:20	Ongoing EWK analyses Speaker: Dimitrii Krasnopevtsev (University of Science and Technology of China (CN))	20m		
15:40	First run 2 papers lessons and full run 2 projections Speaker: Iro Koletsou (Centre National de la Recherche Scientifique (FR))	20m		
16:00 → 16:30	Tea break	30m	Peoples Palace	



Time-Table: ...continued and Thursday (Theory)

16:30 → 17:30	News and Plans for PDFs within ATLAS: PDF Session: Conveners: Amanda Sarkar (University of Oxford (GB)), Mark Sutton	Peoples Palace	
16:30	ATLAS PDF forum, past, present future Speaker: Amanda Sarkar (University of Oxford (GB))	30m	
17:00	PDF review Speakers: Dr Lucian Harland-Lang (University of Oxford), Lucian Harland-Lang (Durham University)	30m	
17:30 → 18:30	SM and BSM: Interplay between BSM Searches and SM Measurements Conveners: Joany Manjarres (Technische Universitaet Dresden (DE)), Vasiliki Kouskoura (Brookhaven National Laboratory (US))	Peoples Palace	
17:30	Converting BSM searches to SM measurements Speakers: Viviana Cavaliere (Brookhaven National Lab), Viviana cavaliere	30m	
18:00	Re-interpreting SM results to BSM searches Speaker: Christian Gutsche (University College London (UK))	30m	
18:30 → 19:00	Tea break	30m	Peoples Palace
19:00 → 20:00	Public Talks: Overview of Public Standard Model Measurements Speaker: Elena Yatsenko (Shanghai Jiao Tong University (CN) & Tsung-Dao Lee Institute (CN))	1h	Peoples Palace
20:00 → 21:30	Reception	1h 30m	SCR Lounge ()
09:45 → 13:55	News from Theory Conveners: Matthias Schott (Johannes-Gutenberg-Universitaet Mainz (DE)), Simone Amoroso (Deutsches Elektronen-Synchrotron (DE))	Peoples Palace	
09:45	Latest theory news and prospects on Jet-Substructure (30+10) Speaker: Mrinal Dasgupta (University of Manchester (GB))	40m	
10:25	BSM physics and reinterpretation of measurements (30+10) Speaker: Riccardo Torre (CERN)	40m	
11:05	Tea Break	30m	
11:35	Correlations between different color-singlet processes (30+10) Speaker: Frank Tackmann (Deutsches Elektronen-Synchrotron (DE))	40m	
12:15	Latest developments on Monte Carlo Generators (30+10) Speaker: Keith Hamilton (University College London (GB))	40m	
12:55	EFT in the context of SM measurements (30+10) Speaker: Tevong You (University of Cambridge)	40m	
14:00 → 18:00	Excursion - Shakespeare	4h	Peoples Palace
18:10 → 18:30	Coffee break	20m	Peoples Palace
18:45 → 19:45	Theory Panel		Hilton, London Tower Bridge, ...
20:30 → 23:30	Workshop Dinner	3h	Peoples Palace



Time-Table: Friday (Future)

FRIDAY, 7 SEPTEMBER

10:30 → 12:00	Run-II Legacy Measurements: Opportunities for Run-2 papers Convener: Andrew Pilkington (University Of Manchester)	Peoples Palace	🕒
10:30	Electroweak Physics and Rare Processes (15+5) Speaker: Cong Geng (University of Michigan (US))	🕒 20m	🕒
10:50	Important W/Z measurements (15+5) Speaker: Jan Kretzschmar (University of Liverpool (GB))	🕒 20m	🕒
11:10	Opportunities in Diffractive and SoftQCD Physics (15+5) Speaker: Sarka Todorova (Centre National de la Recherche Scientifique (FR))	🕒 20m	🕒
11:30	Plans for Jet/Photon Measurements (15+5) Speaker: Heberth Jesus Torres Davila (Technische Universitaet Dresden (DE))	🕒 20m	🕒
12:00 → 12:15	Tea Break	🕒 15m	Peoples Palace
12:15 → 13:30	LPCC Efforts: Reports Convener: Ulla Blumenschein (University of London (GB))	Peoples Palace	🕒
12:15	Comparisons/combinations of experiments, correlations of uncertainties	🕒 15m	🕒
12:40	BSM interpretations of SM measurements: Common fiducial regions & tools, common approaches	🕒 15m	🕒
13:05	Progress on theory predictions: benchmarking, new aproaches, common MC references	🕒 15m	🕒
13:30 → 13:50	How to improve the ATLAS Standard Model Working Group Speaker: Matthias Schott (Johannes-Gutenberg-Universitaet Mainz (DE))	🕒 20m	Peoples Palace
13:50 → 14:00	Workshop Closure Speaker: Bogdan Malaescu (Centre National de la Recherche Scientifique (FR))	🕒 10m	Peoples Palace





ATLAS Standard Model Group

Let's enjoy our time
here in London and
make this
workshop a
success!