LHC EW WG General Meeting

Report of Contributions
Progress with NNLOPS

Tuesday, 15 February 2022 14:00 (20 minutes)

Presenter: WIESEMANN, Marius (Max Planck Society (DE))
Session Classification: Generators
New fixed order predictions for single bosons

Wednesday, 16 February 2022 14:00 (20 minutes)

**Presenters**: BUCCIONI, Federico (University of Zurich); BUCCIONI, Federico (University of Oxford)

**Session Classification**: Generators
Linear power corrections for two-body kinematics

Wednesday, 16 February 2022 14:30 (20 minutes)

Presenter: BUONOCORE, Luca (University of Zurich)
Session Classification: Generators
Polarised simulations for multiboson processes

Tuesday, 15 February 2022 14:30 (20 minutes)

Presenter: PELICCIOLI, Giovanni (Würzburg University)
Session Classification: Generators
NNLO three jet production

Tuesday, 15 February 2022 15:00 (20 minutes)

Presenter: PONCELET, Rene (Cambridge University)
Session Classification: Jets
Recent theory developments on substructure

Tuesday, 15 February 2022 15:30 (20 minutes)

Presenters: REICHELT, Daniel (Durham University, IPPP); REICHELT, Daniel (Christoph-Graupner-Gymnasium Kirchberg); REICHELT, Daniel; REICHELT, Daniel (Technische Universitaet Dresden (DE))

Session Classification: Jets
Recent experimental results on substructure

Tuesday, 15 February 2022 16:00 (20 minutes)

Presenter: CRUZ TORRES, Reynier (Lawrence Berkeley National Lab. (US))

Session Classification: Jets
Z + charm measurement at LHCb

Tuesday, 15 February 2022 16:30 (20 minutes)

Presenter: WILLIAMS, J Michael (Massachusetts Inst. of Technology (US))
Session Classification: Jets
inclusion jets with PDF and EFT interpretations (CMS)

Tuesday, 15 February 2022 17:00 (20 minutes)

**Presenter:** LIPKA, Katerina (Deutsches Elektronen-Synchrotron (DE))

**Session Classification:** Jets
Global ATLAS PDF fit

Tuesday, 15 February 2022 17:30 (20 minutes)

Presenter: GIULI, Francesco (Brandeis University (US))
Session Classification: PDF
Theory overview and recent developments

Tuesday, 15 February 2022 18:00 (20 minutes)

Presenter: CRIDGE, Thomas (University College London)
Session Classification: PDF
Parameter determinations with PDFs

Tuesday, 15 February 2022 18:30 (20 minutes)

**Presenter:** BRITZGER, Daniel (Max-Planck-Institut für Physik München)

**Session Classification:** PDF
Update on the correlation exercise

Session Classification: PDF
LHCb W mass

Wednesday, 16 February 2022 15:30 (20 minutes)

Presenter: RAMOS PERNAS, Miguel (University of Warwick (GB))

Session Classification: Precision measurements
W mass and PDFs

Presenter:  BAGNASCHI, Emanuele Angelo (CERN)
Session Classification:  Precision measurements
Update from W mass combination

**Presenter:** BOONEKAMP, Maarten (Université Paris-Saclay (FR))

**Session Classification:** Precision measurements
Standard Model fit

Wednesday, 16 February 2022 16:00 (20 minutes)

Presenter: ERLER, Jens (IF-UNAM)
Session Classification: Precision measurements
Overview of experimental results

Wednesday, 16 February 2022 16:45 (30 minutes)

with focus on theory limitations

Presenter: GOBLIRSCH-KOLB, Maximilian Emanuel (Brandeis University (US))
Session Classification: Multibosons
Theory overview

Wednesday, 16 February 2022 17:25 (30 minutes)

**Presenter:** LINDERT, Jonas (University of Sussex)

**Session Classification:** Multibosons
Precision and multiboson measurements connection with EFT

Wednesday, 16 February 2022 18:05 (30 minutes)

**Presenter:** DEGRANDE, Celine Catherine A (CERN)

**Session Classification:** Connection with EFT
Report from LHC EFT WG

Wednesday, 16 February 2022 18:35 (20 minutes)

Presenter: LOHWASSER, Kristin (University of Shefield (GB))

Session Classification: Connection with EFT
New fixed order predictions for single bosons

Session Classification: Precision measurements
Fiducial power corrections in resummation

Session Classification: Precision measurements
Status of Yellow Report

Thursday, 17 February 2022 17:00 (15 minutes)

Presenters: LINDERT, Jonas (University of Sussex); CHANG, Philip (Univ. of California San Diego (US))

Session Classification: WG3: Activities report and outlook
**VBF: Community Discussion on YR Recommendations (5’+10’)**

*Thursday, 17 February 2022 17:15 (15 minutes)*

**Presenters:**  GILLBERG, Dag (Carleton University);  LINDERT, Jonas (University of Sussex);  AZ-ZURRI, Paolo (Universita & INFN Pisa (IT))

**Session Classification:**  WG3: Activities report and outlook
Welcome

Tuesday, 15 February 2022 13:50 (5 minutes)

Presenters: VICINI, Alessandro (Università degli Studi e INFN Milano (IT)); PILKINGTON, Andrew (University of Manchester); WACKEROTH, Doreen (SUNY Buffalo); MEONI, Evelin (Università della Calabria e INFN (IT)); VESTERINEN, Mika Anton (University of Warwick (GB)); AZZURRI, Paolo (Università e INFN Pisa (IT)); DITTMAYER, Stefan (Albert Ludwigs Universität Freiburg (DE)); CIULLI, Vitaliano (Università e INFN, Firenze (IT)); BARTER, William (Imperial College (GB))
Overview of status of QED/EW corrections at the Z pole

Thursday, 17 February 2022 14:00 (25 minutes)

Presenter: PICCININI, Fulvio (Pavia University and INFN (IT))

Session Classification: WG1 : Activities report and outlook
Overview of status of pTW/Z resummation benchmarking

Thursday, 17 February 2022 14:35 (25 minutes)

Presenter: MICHEL, Johannes (MIT CTP)
Session Classification: WG1 : Activities report and outlook
Update on pseudodata for weak mixing angle measurements in run 2 and on status of preparation of report

Thursday, 17 February 2022 15:10 (10 minutes)

Presenter: KHUKHUNAISHVILI, Aleko (University of Rochester (US))
Session Classification: WG1 : Activities report and outlook
Discriminating the heavy jet production mechanisms in associated Z + heavy flavor events at the LHC

Thursday, 17 February 2022 15:30 (30 minutes)

Presenter: MALISHEV, Maksim (Moscow State University)

Session Classification: WG2 : Activities report and outlook
Towards an LHC tune: primordial kt

Thursday, 17 February 2022 16:00 (30 minutes)

Presenter: MENDIZABAL MORENTIN, Mikel (Deutsches Elektronen-Synchrotron (DE))

Session Classification: WG2 : Activities report and outlook
Overview on benchmark comparisons, yellow report, LHC tune

Thursday, 17 February 2022 16:30 (20 minutes)

Presenter: BERMUDEZ MARTINEZ, Armando (CMS-DESY)

Session Classification: WG2 : Activities report and outlook
VBS: Community Discussion on YR
Recommendations (5’+10’)

Thursday, 17 February 2022 17:30 (15 minutes)

Presenters:  GOMEZ CEBALLOS RETUERTO, Guillelmo (Massachusetts Inst. of Technology (US)); LOHWASSER, Kristin (University of Sheffield (GB)); ZARO, Marco (Università degli Studi e INFN Milano (IT)); PELLEN, Mathieu (University of Freiburg); LORENZO MARTINEZ, Narei (Centre National de la Recherche Scientifique (FR))

Session Classification:  WG3: Activities report and outlook
VV: Community Discussion on YR Recommendations (5’+10’)

Thursday, 17 February 2022 17:45 (15 minutes)

Presenters:  LONG, Kenneth (Massachusetts Inst. of Technology (US)); WIESEMANN, Marius (Max Planck Society (DE)); KALLWEIT, Stefan (Universita & INFN, Milano-Bicocca (IT)); YAP, Yee Chinn (Deutsches Elektronen-Synchrotron (DE))

Session Classification:  WG3: Activities report and outlook
VVV: Community Discussion on YR
Recommendations (5’+10’)

Thursday, 17 February 2022 18:00 (15 minutes)

Presenters: SCIANDRA, Andrea (University of California, Santa Cruz (US)); SCHOENHERR, Marek (University of Durham (GB)); BHATTACHARYA, Saptaparna (Northwestern University (US))

Session Classification: WG3: Activities report and outlook