

COMETA polarisation study

Third meeting, 15th May 2024

Giovanni Pelliccioli ()
MAX-PLANCK-INSTITUT
FÜR PHYSIK



Setup & runs

- updated version of the writeup, complete info.
 - added details for lepton dressing, and for maximal-rapidity cut for recombination

- Any last-minute suggestion?
- ready to start LO runs
- YODA format: update/template from Frank and Mareen
- ready to start LO runs
 - LO: [all](#)
 - loop-ind (LO): [MOCANLO](#), [Ninh-private](#), [STRIPPER/HighTEA](#), [MG5_aMC@NLO](#)

Contribution from ATLAS & CMS

- **CMS**: Costanza Carrivale, Roberto Covarelli, Giacomo Ortona
- **ATLAS**: Joany Manjarres, Karolos Potamianos, Lailin Xiu, Junjie Zhu, Frank Siegert (already involved from SHERPA side)

What we need: provide *best* TH predictions from tools currently used by ATLAS/CMS for observables we are comparing (binning, range, definitions given in the setup document).

Not foreseen to fit new predictions in ATLAS/CMS modelling tools (unless this is already done with predictions existing in the literature)

Next meeting



- next meeting **Wednesday 19th of June at 3pm CERN time**
- is this fine with all (most) of us?
- realistic to have at least LO runs by then



COMETA workshop & MBI


- registrations open for the [polarisation workshop in Toulouse \(23-24 September\)](#)
- this is meant (mostly) for us: **please register!**
- one afternoon dedicated to our comparison work
- two sessions for talks and Monte Carlo presentations
- one hands-on session: MG5_aMC@NLO, POWHEG-BOX-RES, SHERPA, others?
- happens right before MBI (25-27 September, also in Toulouse)

COMETA Workshop on Vector-Boson Polarisations

23–24 Sept 2024
Maison de la Recherche et de la Valorisation, Toulouse (France)
Europe/Paris timezone

<ul style="list-style-type: none"> <li style="background-color: #d9e1f2; padding: 2px 5px; margin-bottom: 2px;">Overview <li style="padding: 2px 5px; margin-bottom: 2px;">Timetable <li style="padding: 2px 5px; margin-bottom: 2px;">Registration <li style="padding: 2px 5px;">Participant List 	<p>The focus of this workshop is to review the state-of-the-art in polarisation modelling and measurements, discussing the required improvements, with an eye on machine-learning-based techniques to discriminate amongst vector-boson polarisations.</p> <p>It is hosted at the University of Toulouse in the two days preceding the Multi-Boson Interaction 2024 conference (also hosted in Toulouse).</p> <p>This workshop is organised by COMETA COST Action (CA22130).</p> <p style="font-size: small;"> FosWiki Webpage COST webpage </p> <div style="display: flex; align-items: center; margin-top: 10px;"> <div style="text-align: center; margin-right: 10px;">  Starts 23 Sept 2024, 09:00 Ends 24 Sept 2024, 18:00 <small>Europe/Paris</small> </div> <div style="text-align: center; margin-right: 10px;">  <small>Maison de la Recherche et de la Valorisation, Toulouse (France) Amphi 3</small> <small>Maison de la Recherche et de la Valorisation 75 Cr des Sciences, 31400 Toulouse</small> Go to map </div> </div>
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