JANUARY 2024, NO 1



Welcome to our newsletter where we try to summarise all the **key happenings** in the **COMETA action**. While our beautiful website is being prepared, make sure to check out our **TWIKI** for more detailed information.

## Publications

Since the start of COMETA we have already published four research papers:

- "NLO EW corrections to polarised  $W^+W^-$  production and decay at the LHC", A. Denner; C. Haitz; G. Pelliccioli, arXiv:2311.16031
- "Measurement and interpretation of same-sign W boson pair production in association with two jets in pp collisions at  $\sqrt{s} = 13$  TeV with the ATLAS detector", ATLAS Collaboration, arXiv:2312.00420
- "Functional renormalization group for signal detection and stochastic ergodicity breaking", Harold Erbin; Riccardo Finotello; Bio Wahabou Kpera; Vincent Lahoche; Dine Ousmane Samary, arXiv:2310.07499
- "Probing Higgs-muon interactions at a multi-TeV muon collider", Eugenia Celada; Tao Han; Wolfgang Kilian; Nils Kreher; Yang Ma; Fabio Maltoni; Davide Pagani; Jürgen Reuter; Tobias Striegl; Keping Xie, arXiv:2312.13082

If your publication is not in the list and you think it should be, make sure to check our TWIKI for more information on how to get it there!

### Upcoming COMETA events

- 1st COMETA General Meeting, Izmir, Turkey, 28.2. 1.3., indico.cern.ch/1334055
- Combined EFT analysis of the EW sector within CMS, Milano, Italy, 23.5. 24.5.
- Effective Field Theory in Multi-Boson Production Workshop, Padova, Italy, 10.6. 11.6., indico.cern.ch/1358085
- COMETA Workshop on Boosted Hadronic Bosons, Vienna, Austria, 15.7. 17.7.
- Baltic School of HEP and Accelerator Technologies, Kuldiga, Latvia, 5.8. 9.8.
- COMETA Workshop on Vector Boson Polarisations, Toulouse, France, 23.9. 24.9., indico.cern.ch/1371888

#### Other interesting events

- LHC EW MB Focus group: Topical discussion on polarised processes, 15.2., indico.cern.ch/1370266
- LHCP, Boston, USA, 3.6. 7.6., indico.cern.ch/1253590
- HEFT 2024, Bologna, Italy, 12.6. 14.6., indico.cern.ch/1339526
- ICHEP, Prague, Czech Republic, 17.7. 24.7., https://ichep2024.org/
- Higgs days, 9.9. 13.9., Santander, Spain
- Higgs Hunting, Orsay, France, 23.9. 25.9., indico.ijclab.in2p3.fr/10259
- Multi-Boson Interactions 2024, Toulouse, France, 25.9. 27.9.
- Higgs 2024, Uppsala, Sweden, 4.11. 8.11.

### JOB OPENINGS

Let us know if you have any job openings that would be interesting to our members and we will advertise them here in the future!

# Advertisements

- The second call for Short Term Scientific Mission (STSM) and conference grants within COMETA is now closed. There will be three more calls in 2024 and you can find more information on how to apply here.
- For our members from the theory community there is an **open call for poster abstracts for the LHCP conference** with deadline 15.2. You can find more information here. Experimental poster abstracts should go through collaboration conveners.

If there is anything you want us to advertise send us an e-mail and we will make sure to include it in the next number of the COMETA Newsletter!

Your editors, Joany Manjarres Ramos & Toni Sculac