

Session Program

15-17 Nov 2023

**6th General Meeting of the LHC EFT Working
Group**

Area reports

CERN, 4/3-006 - TH Conference Room

Wednesday 15 November

14:00

15:30

Area reports: Joint session with LHC Higgs WG (<https://indico.cern.ch/event/1276727/sessions/508583/#20231115>) ACHTUNG: SEPARATE ZOOM: <https://cern.zoom.us/j/65534194643?pwd=OHcrOThZdVdRdHBDWklGeTRxK0dZZz09>

Session |

Location: CERN, 503/1-001 - Council Chamber, Please note that the Zoom room for this session is <https://cern.zoom.us/j/65534194643?pwd=OHcrOThZdVdRdHBDWklGeTRxK0dZZz09>

Thursday 16 November

14:20

Area reports: Fit and related systematics - Area 4

Session | **Location:** CERN, 4/3-006 - TH Conference Room

14:20-14:30 **Area 4: Update on EFTWG fitting exercise (10'+5')**

Speaker

Kristin Lohwasser

14:35-14:45 **Area 4: Report on LHC reinterpretation forum workshop (10'+5')**

Speaker

Ken Mimasu

14:50-15:10

Area 4: A practical framework of EFT fits with published likelihoods (20'+5')

Speaker

Kyle Stuart Cranmer

15:15-15:25

Area 4: Introducing the FAIROS-HEP Research Coordination Network (5'+5')

Speaker

Kyle Stuart Cranmer

15:25-15:35 **Area 4: Plans & Discussion**

15:40

16:10

Area reports: Observables - Area 3

Session | **Location:** CERN, 4/3-006 - TH Conference Room

16:10-16:50 **Machine Learning opportunities for EFT analyses**

Speaker

Maeve Madigan

16:50-17:05

Computing optimal observables from the Matrix Element Method with Conditional Normalizing Flows

Speaker

Davide Valsecchi

17:05-17:20

Quantum Computing and Quantum information in estimating EFTs from measurements

Speaker

Vincent Alexander Croft

17:20-17:35 **Public repository for limits on SMEFT Wilson coefficients**

Speaker

Dr SUPRATIM DAS BAKSHI

17:35-17:50

Roadmap towards future combinations and Effective Field Theory interpretations of top+X processes

Speaker

Jacob Julian Kempster

17:50

Friday 17 November

09:00

Area reports: Predictions & Tools - Area 2

Session | **Location:** CERN, 4/3-006 - TH Conference Room

09:00-09:15 **Area 2: Update on EFT prediction note**

Speaker

Alberto Belvedere

09:20-09:35

Area 2: Update on common format & toolchain for SMEFT parameterisations (STXS)

Speakers

Eleonora Rossi, Ken Mimasu

09:40-10:05

SmeftFR v3 - a tool for creating and handling vertices in SMEFT to the $1/\Lambda^4$ order

Speaker

Michal Ryczkowski

10:10

10:40

Area reports: Benchmark Scenarios from UV Models - Area 5

Session | **Location:** CERN, 4/3-006 - TH Conference Room | **Conveners:**
Peter Stangl, Shankha Banerjee, Sandra Kortner

10:40-10:55 **Summary of Area 5 activities and new directions**

Speaker

Peter Stangl

10:55-11:15 **Matching 2HDM onto Effective Field Theories in ATLAS (15' + 5')**

Speaker

Andrea Visibile

11:15-11:40

Matching database + new framework for matching repository (20' + 5')

Speaker

Juan Carlos Criado

11:40-12:00

One Loop Effective Action up to Dimension Eight: integrating out heavy scalars and fermions (15' + 5')

Speaker

Joydeep Chakraborty

12:00

13:20

Area reports: EFT formalism - Area 1

Session | **Location:** CERN, 4/3-006 - TH Conference Room

13:20-13:45 **Higher-order corrections in SMEFT (20'+5')**

Speaker

Anke Biekoetter

13:45–14:10 Positivity constraints (20'+5')**Speaker**

Mr Marc Riembau Saperas

14:10–14:30 SMEFT vs HEFT: multi-Higgs phenomenology (15'+5')**Speaker**

Javier Martínez Martín

14:30–14:50 Geometry of EFTs (15'+5')**Speakers**

Julie Pagès, Julie Pagès

14:50

14:50

Area reports: Area reports - Area 6**Session** | **Location:** CERN, 4/3-006 - TH Conference Room**14:50–15:10****Closing in on New Physics via the Flavor, Collider, and Electroweak Triad (15+5)****Speaker**

Ben Stefanek

15:10–15:30 Effective couplings in $B^0 \to K^{*0} \mu^+ \mu^-$ (15+5)**Speaker**

Rafael Silva Coutinho

15:30–15:45 Workshop summary: Heavy flavour aspects in EFT - SL decays (10+5)**Speaker**

Biljana Mitreska

15:45–16:05 Leading directions in SMEFT (15+5)**Speaker**

Ajdin Palavric

16:05