

**Session Program**

**Nov 15 - 17, 2023**

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

***Area reports***

CERN, 4/3-006 - TH Conference Room

## Wed, November 15

2:00 PM

3:30 PM

**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>

## Thu, November 16

2:20 PM

### Area reports: Fit and related systematics - Area 4

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

2:20 - 2:30 PM **Area 4: Update on EFTWG fitting exercise (10'+5')**

**Speaker**

Kristin Lohwasser

2:35 - 2:45 PM **Area 4: Report on LHC reinterpretation forum workshop (10'+5')**

**Speaker**

Ken Mimasu

2:50 - 3:10 PM

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

**Speaker**

Kyle Stuart Cranmer

3:15 - 3:25 PM

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

**Speaker**

Kyle Stuart Cranmer

3:25 - 3:35 PM **Area 4: Plans & Discussion**

3:40 PM

4:10 PM

### Area reports: Observables - Area 3

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

4:10 - 4:50 PM **Machine Learning opportunities for EFT analyses**

**Speaker**

Maeve Madigan

4:50 - 5:05 PM

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

**Speaker**

Davide Valsecchi

5:05 - 5:20 PM

**Quantum Computing and Quantum information in estimating EFTs from measurements**

**Speaker**

Vincent Alexander Croft

5:20 - 5:35 PM **Public repository for limits on SMEFT Wilson coefficients**

**Speaker**

Dr SUPRATIM DAS BAKSHI

5:35 - 5:50 PM

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

**Speaker**

Jacob Julian Kempster

5:50 PM

## Fri, November 17

9:00 AM

### Area reports: Predictions & Tools - Area 2

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

9:00 - 9:15 AM **Area 2: Update on EFT prediction note**

**Speaker**

Alberto Belvedere

9:20 - 9:35 AM

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

**Speakers**

Eleonora Rossi, Ken Mimasu

9:40 - 10:05 AM

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

**Speaker**

Michal Ryczkowski

10:10 AM

10:40 AM

### 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 AM **Summary of Area 5 activities and new directions**

**Speaker**

Peter Stangl

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

**Speaker**

Andrea Visibile

11:15 - 11:40 AM

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

**Speaker**

Juan Carlos Criado

11:40 AM - 12:00 PM

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

**Speaker**

Joydeep Chakraborty

12:00 PM

1:20 PM

### Area reports: EFT formalism - Area 1

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

1:20 - 1:45 PM **Higher-order corrections in SMEFT (20'+5')**

**Speaker**  
Anke Biekötter

1:45 - 2:10 PM **Positivity constraints (20'+5')**

**Speaker**  
Mr Marc Riembau Saperas

2:10 - 2:30 PM **SMEFT vs HEFT: multi-Higgs phenomenology (15'+5')**

**Speaker**  
Javier Martínez Martín

2:30 - 2:50 PM **Geometry of EFTs (15'+5')**

**Speakers**  
Julie Pagès, Julie Pagès

2:50 PM

2:50 PM

**Area reports: Area reports - Area 6**

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

2:50 - 3:10 PM

**Closing in on New Physics via the Flavor, Collider, and Electroweak Triad (15+5)**

**Speaker**  
Ben Stefanek

3:10 - 3:30 PM **Effective couplings in  $B^0 \to K^{*0} \mu^+ \mu^-$  (15+5)**

**Speaker**  
Rafael Silva Coutinho

3:30 - 3:45 PM

**Workshop summary: Heavy flavour aspects in EFT - SL decays (10+5)**

**Speaker**  
Biljana Mitreska

3:45 - 4:05 PM **Leading directions in SMEFT (15+5)**

**Speaker**  
Ajdin Palavric

4:05 PM