

7th General Meeting of the LHC EFT Working Group

Report of Contributions

Contribution ID: 48

Type: **not specified**

Two-loop RGEs from geometry

Tuesday, 23 April 2024 16:00 (30 minutes)

RGE calculations in EFTs can be carried out efficiently in a geometric picture, where field redefinitions are just coordinate changes. Building on an old method introduced by 't Hooft in 1973, we extend the geometric formulation for scalar theories to the two-loop order and derive the counterterms which renormalize the theory at two loops. As applications of our results, we derive the two-loop counterterms and RGE for the $O(n)$ EFT to dimension six, the scalar sector of the SMEFT to dimension six, and chiral perturbation theory to order p^6 .

Presenter: NATEROP, Luca (University of Zürich and PSI)

Session Classification: EFT Session

Contribution ID: 49

Type: **not specified**

MFV Hilbert Series (Remote)

Tuesday, 23 April 2024 17:00 (30 minutes)

Presenter: QUILEZ LASANTA, Pablo (University of California San Diego (UCSD))

Session Classification: EFT Session

Contribution ID: 50

Type: **not specified**

Going beyond EFT

Tuesday, 23 April 2024 16:30 (30 minutes)

Presenter: Prof. SANZ GONZALEZ, Veronica (Universities of Valencia and Sussex)

Session Classification: EFT Session

Contribution ID: 51

Type: **not specified**

HEFT matching / matching 2HDM

Tuesday, 23 April 2024 09:00 (30 minutes)

Presenter: FONTES, Duarte

Session Classification: EFT Session

Contribution ID: 52

Type: **not specified**

New developments in automated and functional matching

Tuesday, 23 April 2024 09:30 (30 minutes)

Presenter: Dr THOMSEN, Anders Eller (University of Bern)

Session Classification: EFT Session

Contribution ID: 53

Type: **not specified**

MatchmakerEFT: Present & Future

Tuesday, 23 April 2024 10:00 (30 minutes)

Presenter: OLGOSO RUIZ, Pablo (University of Padova)

Session Classification: EFT Session

Contribution ID: 54

Type: **not specified**

SIMUnet

Tuesday, 23 April 2024 11:00 (30 minutes)

Presenter: UBIALI, Maria (University of Cambridge (GB))

Session Classification: EFT Session

Contribution ID: 55

Type: **not specified**

ATLAS fitting infrastructure

Tuesday, 23 April 2024 11:30 (30 minutes)

Presenter: VISIBLE, Andrea (Nikhef National institute for subatomic physics (NL))

Session Classification: EFT Session

Contribution ID: 56

Type: **not specified**

CMS fitting infrastructure

Tuesday, 23 April 2024 12:00 (30 minutes)

Presenter: Dr BOLDRINI, Giacomo (Centre National de la Recherche Scientifique (FR))

Session Classification: EFT Session

Contribution ID: 57

Type: **not specified**

Machine enhanced CP asymmetries (Remote)

Tuesday, 23 April 2024 15:00 (30 minutes)

Presenter: BHARDWAJ, Akanksha (Oklahoma State University)

Session Classification: EFT Session

Contribution ID: 58

Type: **not specified**

ML-informed STXS

Tuesday, 23 April 2024 14:30 (30 minutes)

Presenter: FOLGADO, Miguel (IFIC / CSIC-UV)

Session Classification: EFT Session

Contribution ID: **60**

Type: **not specified**

Recent LHCb results in $b \rightarrow c\ell\bar{\nu}$ and $b \rightarrow s\ell\ell$

Wednesday, 24 April 2024 09:00 (30 minutes)

Presenter: GARCIA PARDINAS, Julian (CERN)

Session Classification: EFT Session

Contribution ID: **61**

Type: **not specified**

CMS Flavour Measurements of interest for EFT fits

Wednesday, 24 April 2024 09:30 (30 minutes)

Presenter: KOVALSKYI, Dmytro (Massachusetts Inst. of Technology (US))

Session Classification: EFT Session

Contribution ID: 62

Type: **not specified**

B-Physics EFT in ATLAS

Wednesday, 24 April 2024 10:00 (30 minutes)

Presenter: REZNICEK, Pavel (Charles University (CZ))

Session Classification: EFT Session

Contribution ID: 63

Type: **not specified**

Quartic anomalous coupling studies using intact protons at the LHC (Remote)

Wednesday, 24 April 2024 11:00 (30 minutes)

Presenters: ROYON, Christophe (The University of Kansas (US)); BALDENEGRO BARRERA, Cristian (Sapienza Universita e INFN, Roma I (IT))

Session Classification: EFT Session

Contribution ID: 64

Type: **not specified**

Towards a truly global SMEFT analysis without flavor assumptions

Wednesday, 24 April 2024 11:30 (30 minutes)

Presenter: Dr TONG, Tom (University of Siegen)

Session Classification: EFT Session

Contribution ID: 65

Type: **not specified**

Model interpretation of triple gauge neutral couplings

Wednesday, 24 April 2024 12:00 (30 minutes)

Presenter: Prof. SANZ GONZALEZ, Veronica (Universities of Valencia and Sussex)

Session Classification: EFT Session