

Higgs and Effective Field Theory - HEFT 2024

Wednesday 12 June 2024

Session: Opening and multiboson - Aula Prodi - Complesso di S. Giovanni in Monte (09:00 - 10:40)

-Conveners: Ilaria Brivio

time	[id] title	presenter
09:00	[67] Welcome	
09:05	[57] Why use SMEFT?	DAWSON, Sally
09:35	[34] Triple-gauge couplings in LHC diboson production: a SMEFT view from every angle	EL FAHAM, Hesham
09:55	[38] CP violation in gluon-induced diboson processes	THOMAS, Marion
10:10	[21] EFT observable stability under NLO corrections through interference revival	MALTONI, Matteo
10:25	[17] Triboson production in the SMEFT	CELADA, Eugenia

Session: Precision - Aula Prodi - Complesso di S. Giovanni in Monte (11:10 - 13:00)

-Conveners: Ramona Groeber

time	[id] title	presenter
11:10	[59] Precision calculation in SMEFT	PECJAK, Ben
11:40	[45] The running of Higgs decays at dimension eight in the SMEFT	GUEDES, Guilherme
12:00	[24] Field redefinitions and infinite field anomalous dimension	ROOSMALE NEPVEU, Jasper
12:15	[25] The LEFT at NLL accuracy	NATEROP, Luca
12:30	[42] Loop-corrected Fierz Identities and Evanescent shifts	PESUT, Marko
12:45	[19] On γ_5 schemes and the interplay of SMEFT operators (in the Higgs-gluon coupling and beyond)	DI NOI, Stefano

Session: Matching - Aula Prodi - Complesso di S. Giovanni in Monte (14:30 - 16:15)

-Conveners: Ken Mimasu

time	[id] title	presenter
14:30	[60] Recent developments in the EFT matching and RG running.	FUENTES-MARTIN, Javier
15:00	[22] EFT matching in spontaneously broken gauge theories	Dr THOMSEN, Anders Eller
15:20	[13] One-loop effective action up to dimension eight	Mr RAHAMAN, shakeel ur
15:40	[36] The SMEFT One Loop Dictionary	OLGOSO, Pablo
16:00	[37] Methods for on-shell matching	LÓPEZ MIRAS, JAVIER

Session: Top - Aula Prodi - Complesso di S. Giovanni in Monte (16:45 - 18:10)

-Conveners: Davide Pagani

time	[id] title	presenter
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16:45	[43] Precision tests of third-generation four-quark SMEFT operators	HAISCH, Uli
17:05	[26] Collider sensitivity to SMEFT heavy-quark operators at one-loop in top-quark processes	Dr VASQUEZ, Andres
17:25	[20] Indirect constraints on top quark operators from a global SMEFT analysis	STANZIONE, Alfredo
17:40	[9] Couplings of axion-like particles in linear and chiral EFT realisations	ESSER, Fabian
17:55	[33] New Physics virtual correction to top-pair production	TENTORI, Simone

Thursday 13 June 2024

Session: Amplitudes and on-shell methods - Aula Prodi - Complesso di S. Giovanni in Monte (09:00 - 10:45)

-Conveners: Gauthier Durieux

time	[id] title	presenter
09:00	[58] Recent developments in EFT scattering amplitudes and positivity constraints	SHEN, Chia-Hsien
09:30	[29] Construction and conversion of operator bases in Effective Field Theories	REN, Zhe
09:50	[50] Exploring ALP EFTs: Operator Basis Construction and Hilbert Series Techniques	YAO, Chang-Yuan
10:10	[41] Heavy Dark Matter EFT for any spin	KVEDARAITE, Sandra
10:30	[46] Anomalous Dimensions via on-shell Methods: Operator Mixing and Leading Mass Effects	BRESCIANI, Luigi Carlo

Session: RGE, flavor, four-fermion operators - Aula Prodi - Complesso di S. Giovanni in Monte (11:15 - 12:50)

-Conveners: Celine Catherine A Degrande

time	[id] title	presenter
11:15	[16] Impact of renormalisation group equation on Higgs production in the SMEFT	VENTURA, Giuseppe
11:30	[47] The global flavour structure of the LEFT	SUTHERLAND, David
11:50	[5] Froggatt-Nielsen Models Meet SMEFT	LOISA, Eetu
12:05	[62] SMEFT effects in neutrino and low-energy experiments	FALKOWSKI, Adam
12:35	[30] Missing Energy plus Jet in the SMEFT	WENDLER, Daniel

Session: ALPs, BSM connection, geometry - Aula Prodi - Complesso di S. Giovanni in Monte (14:30 - 16:20)

-Conveners: Adam Orion Martin

time	[id] title	presenter
14:30	[51] Small Instanton-induced Flavor Invariants and the Axion Potential	VUONG, Hoa
14:50	[48] EFT tools to probe CP-violating axion-like particles	LEVATI, Gabriele
15:05	[39] The Standard Model Gauge Group, SMEFT, and Generalized Symmetries	XU, Ling-Xiao
15:25	[32] Effective Field Theories of the MSSM	WILSCH, Felix
15:45	[52] A Geometrical Formalism of Functional Matching	LI, Xu-Xiang
16:05	[40] Jet Bundle Geometry of Scalar EFTs	ALMINAWI, Mohammad

Session: HEFT and dimension 8 - Aula Prodi - Complesso di S. Giovanni in Monte (16:50 - 18:35)

-Conveners: Gudrun Heinrich

time	[id] title	presenter
16:50	[7] Recent progress on Bosonic HEFT: renormalization, matching and colliders	HERRERO SOLANS, Maria Jose

17:10	[53] Loop effects on Higgs and vector boson production in HEFT	Mr QUEZADA CALONGE, Carlos
17:25	[31] Higgs boson offshell measurements probe non-linearity	Dr ., Anisha
17:45	[63] Recent developments of dimension 8 effects in SMEFT	FONTES, Duarte
18:15	[6] On the convergence of the SMEFT expansion	CORBETT, Tyler

Friday 14 June 2024

Session: Fits - Aula Prodi - Complesso di S. Giovanni in Monte (09:00 - 10:45)

-Conveners: Eleni Vryonidou

time	[id] title	presenter
09:00	[61] Global analyses and the role of Machine Learning in EFT searches.	Prof. SANZ GONZALEZ, Veronica
09:30	[18] Constraining new physics effective interactions via a global fit of electroweak, Higgs, top, and flavor observables	MIRALLES, Victor
09:50	[23] How to fit PDFs in the presence of new physics?	HAMMOU, Elie
10:05	[54] smelli 3 - a flavourful global SMEFT likelihood	STANGL, Peter
10:25	[11] The automation of SMEFT-assisted constraints on UV-complete models	ROSSIA, Alejo Nahuel

Session: New perspectives - Aula Prodi - Complesso di S. Giovanni in Monte (11:15 - 13:05)

-Conveners: Fabio Maltoni

time	[id] title	presenter
11:15	[64] EFT of large scale structures in cosmology	SIMONOVIC, Marko
11:45	[66] EFTs for finite temperature	CHALA, Mikael
12:15	[27] Dimensionally reduced EFTs for cosmological phase transitions	GIL, Luis
12:30	[65] Physics opportunities at future lepton colliders	BUTTAZZO, Dario
13:00	[68] Closing	