

EW SMEFT: References for further reading

[not a historically complete list, but a useful set of references to check out to understand more and look up formulas or plots]

Theory refs (lectures 1 and 2)

Most results shown in the lecture are in the latest SMEFTsim manual [1]

Some discussions + many observable predictions in the SMEFT review [19]

Bases: Warsaw [2] HISZ [3] SILH [4]

Bases for $d = 7$ [5, 6], 8 [7, 8], 9 [9, 10]

Operator counting at arbitrary dimension [6]

Lagrangian manipulations, RGE, main observable predictions... [11]

Flavor symmetries in SMEFT [14, 15, 16]

Input parameters for CKM [12] (not needed with $U(3)^5$ flavor symmetry [13])

Propagator corrections [17, 18]

Pheno refs (lectures 3 and 4)

EWPO LEP paper [20]

EWPO in SMEFT: LO [21], NLO [22, 23, 24, 25], LO to $d = 8$ [26]

Unconstrained directions in EWPO [27, 28]

Detailed diboson analyses: [29, 17]

EWPO+WW fits: [30, 17, 28]


STXS [31, 32, 33]

EW + Higgs fits: SFitter [34, 35, 36] Éboli–Gonzalez-Garcia [37, 38, 39, 40] HEPfit [41, 42, 43] Ellis [44, 45, 46, 47, 48] Dawson [49, 25]

Diboson and VBS: [50, 51, 52]

EW + Higgs + top fits: Ellis [47] SMEFiT [53]

Geometry of the scalar sector [54, 55, 56] also: [57, 58]

SMEFTsim documentation: navigate from 

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