

Jens Erler and Paul Langacker (Paul indicated he wants to retire from authorship)

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we discuss some aspects of the fit results in the context of BSM physics

we perform additional fits allowing new physics

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Restructuring

move some parts?

author reshuffle?

Introduction

Higgs potential, electroweak currents, simple bosonic mass-coupling relations

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Low energy electroweak observables

4-Fermi contact interactions, vscattering, PVES, APV Figures: (1) $g_V^{ve} vs. g_A^{ve}$, (2) $C_{1u} + C_{1d} vs. C_{1u} - C_{1d}$, (3) $sin^2\theta_W vs. \mu$

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$\boldsymbol{\cdot}$ W and Z boson physics

 e^+e^- scattering below the Z pole, Z pole physics, LEP 2, W and Z decays **Figure: (4)** g_V^f *vs.* g_A^f (eff. couplings)

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 τ -decays and α_s , muon g–2

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Constraints on new physics

oblique parameters, Z' bosons Figure: (7) S vs. T

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Searches Particle Listings

Dynamical EW Symmetry Breaking (ST)

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➡ Comment not clear to us:

We did quote LHC limits (e.g. for Z').

For M_H we used the then favored LHC range.

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- Yes (!) but this was all that was available at the time

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 unpublished results, unavailable correlations

EW fit should be reasonable up to date