Structure of dimension-six derivative interactions in pseudo Nambu-Goldstone N Higgs doublet models

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The composite Higgs is one of the candidates for the beyond the SM and the Linear Collider experiments can reveal the composite nature of the Higgs. In this talk, I derive the general structure of dimension-six derivative interactions in the N Higgs doublet models, where Higgs fields arise as pseudo Nambu-Goldstone modes of a strongly interacting sector. As phenomenological processes, I show scattering amplitudes and cross sections of longitudinal gauge bosons and Higgs bosons at high energy on models involving two Higgs doublets, and compare them with those of one Higgs doublet.

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