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## Progress on holographic vacuum misalignment

*Friday, 2 August 2024 12:15 (20 minutes)*

We present a bottom-up holographic model that contains the dual description of a strongly coupled field theory. The spontaneous breaking of an approximate global symmetry in the theory produces the  $SO(5)/SO(4)$  coset relevant to minimal composite-Higgs models.

Some boundary-localised terms are introduced in the dual gravity for consistency and production of the desired properties of the model. Via vacuum misalignment, the interplay of bulk and boundary-localised couplings leads to the breaking of the  $SO(5)$  symmetry to its  $SO(4)$  or  $SO(3)$  subgroup. In the dual field theory, the model contains a  $SO(4)$  gauge symmetry, which is spontaneously broken into its  $SO(3)$  subgroup. We investigate the consequences of the higgsing phenomenon by analysing the spectrum of fluctuations within the model, interpreted in terms of four-dimensional field theory, across selected parameter configurations. The talk is based on arXiv:2405.08714.

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