

# Constrained instantons in SU(2) Yang-Mills-Higgs

*Friday 17 November 2023 12:00 (30 minutes)*

The presence of the Higgs field in the Standard Model breaks the scale invariance of the electroweak theory. The result is that Yang-Mills instantons cease to exist in the EW sector. It was speculated that some approximate constrained instanton solutions still exist and give non-negligible contributions to the path integral. Such solutions would give rise to a new source of baryon number violation in the SM. In this talk, I will demonstrate the existence of constrained instantons in the SU(2) Yang-Mills-Higgs theory by presenting specific examples of such solutions.

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