

# Symmetry Breaking in Accelerated Frames: Can It actually Be Restored?

*Friday, January 24, 2025 10:05 AM (25 minutes)*

In recent years, a considerable amount of literature has suggested that spontaneously broken quantum field theories can undergo a phase transition to an unbroken phase due to the effect of Unruh radiation, experienced by uniformly accelerated observers, at sufficiently high accelerations. However, earlier works (including one by Unruh himself) and standard renormalization techniques in curved spacetimes rule out this possibility. In this talk, we will explore the fundamental reasons behind this discrepancy. The main assumptions and differing considerations, whether explicitly or implicitly supported by the two distinct factions, will be discussed. Finally, conclusions will be drawn, aiming to compare the results obtained for uniformly accelerated systems with those of the more general gravitational case.

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