

# Dynamics of coherent vacuum domains from axion fragmentation

*Sunday, 2 November 2025 13:30 (30 minutes)*

In this talk we will present the formation of multiple vacuum states in axion models with non-degenerate vacua, which originate from vacuum fluctuations amplified via parametric resonance. The domains are classified as sub-horizon, cross-horizon, or super-horizon on their scale upon formation, leading to the different cosmic evolution as well as gravitational wave spectrum

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