

The Quest for the Mechanism behind the Matter-Antimatter Asymmetry

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Our own existence remains a mystery, as some yet unknown mechanism must have generated an excess of matter over antimatter during the evolution of the Universe. After introducing why physics beyond the Standard Model is required to account for the observed matter-antimatter asymmetry, I will give an overview of different theoretical mechanisms that could potentially explain such an asymmetry. In particular, I will highlight the intriguing possible connection to neutrino physics. I will further discuss the challenges of probing baryogenesis models and outline some promising experimental strategies.