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Abstract:	In recent years, we have seen significant advances in observational astrophysics. These observations allow us to probe our fundamental physics theories, i.e., to test our standard model. In this thesis, we will explore a case using relics from the early universe, specifically Big Bang Nucleosynthesis, to investigate an existing tension in neutron lifetime measurements. We will introduce new states carrying baryon numbers (dark baryons) to address the neutron lifetime issue. In particular, we examine a model of dark baryons that give rise to purely invisible dark decay channels of neutrons and, hence, are difficult to detect in terrestrial experiments. We can show that this model, nonetheless, impacts primordial nucleosynthesis, particularly altering the abundance of D and 4 He. This gives rise to new constraints, which we derive considering this dark baryon as a dark matter candidate..
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