Sixteenth Marcel Grossmann Meeting



Contribution ID: 986

Type: Talk in the parallel session

Linking the lithium problem and the H_0 tension: the gravitational constant at BBN

Monday, 5 July 2021 18:30 (30 minutes)

The primordial abundance of lithium is still a subject of controversy, given the disagreement between numerical results and observational estimates. We show how this discrepancy can be undestood in the context of variation of fundamental constants at the epoch of Big Bang Nucleosynthesis. The variation of Newton's constant plays a crucial role. In particular, its interpretation in terms of additional relativistic degrees of freedom suggests an alleviation to the H_0 tension.

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Session Classification: Variation of the Fundamental Constants, Tests of the Fundamental Symmetries and Probes of the Dark Sector

Track Classification: Precision Tests: Variation of the fundamental constants, tests of the fundamental symmetries and probes of the dark sector