

# Highlight on the X17

« The X17 from the Atomki anomalies to the recent PADME result »

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In view of the experimental anomalies observed by the Atomki collaboration, we critically re-examine the possible theoretical interpretation of them in terms of a new BSM boson X with mass around 17 MeV. Employing a low-energy effective field theory, we estimate the range of values of the nucleon couplings to the new light state in order to match the experimental observations, with the aim of identifying the viable spin/parity assignments. We then discuss the recent results from MEG-II and PADME searches.

