

Seminarium Zakładu Fizyki Teoretycznej

Departament Badań Podstawowych
Narodowego Centrum Badań Jądrowych

17 kwietnia 2019 r. (środa), godz.12:15

NCBJ, sala 404, **Pasteura 7**

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Pseudo Nambu-Goldstone Dark Matter

ABSTRACT:

We consider cases where the dark matter-nucleon interaction is naturally suppressed. We explicitly show that by extending the standard model scalar sector by a number of singlets, can lead to a vanishing direct detection cross section, if some softly broken symmetries are imposed in the dark sector. In particular, we show that the pseudo-Nambu-Goldstone bosons of some softly broken symmetries can constitute the Dark Matter of the Universe, while naturally explaining the missing signal in nuclear recoil experiments.

Serdecznie zapraszamy,

M. Kowal, W. Piechocki, J. Skalski, L. Szymanowski