



国立研究開発法人理化学研究所 仁科加速器科学研究センター
第291回 RIBF核物理セミナー
RIKEN Nishina Center for Accelerator Based Science
The 291st RIBF Nuclear Physics Seminar

Observation of an anti-kaon nuclear bound state, $K\bar{n}N$

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The existence of an exotic nuclear bound state containing an anti-kaon has been believed since the strong attractive $K\bar{n}N$ interaction was established.

The lightest anti-kaon nuclear bound state, $K\bar{n}N$, had been searched for by many experiments for years; however the existence of the $K\bar{n}N$ was not confirmed by them.

Recently, we carried out an experiment to search for the $K\bar{n}N$ by using anti-kaon beam at J-PARC, and finally observed a clear signal of the $K\bar{n}N$.

As a result, the existence of the $K\bar{n}N$ has been confirmed and its properties (binding energy and so on) have been determined.

In this seminar, details of the experiment and the result will be presented.

Jan. 26th (Tue.) 2021 13:30~
via Zoom meeting system

* The talk will be given in English language.

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