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FIRST RESULTS ON THE EXPERIMENTAL SEARCH FOR η' -MESIC NUCLEI WITH THE $^{12}\text{C}(p, d)$ REACTION

η -PRiME/Super-FRS Collaboration (Y. K. Tanaka, H. Fujioka, T. Nagae et al.)

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Missing-mass spectroscopy of the $^{12}\text{C}(p, d)$ reaction near the η' -meson production threshold

η -PRiME/Super-FRS Collaboration (Y. K. Tanaka, H. Fujioka, T. Nagae et al.)

Phys. Rev. C 97, 015202 (2018)

Missing-mass spectroscopy with the $^6\text{Li}(\pi^-, K^+)X$ reaction to search for $^6_{\Lambda}\text{H}$
J-PARC E10 Collaboration (R. Honda, H. Fujioka, T. Nagae, M. Naruki et al.)

Phys. Rev. C 96, 014005 (2017)

Systematic analysis of inelastic α scattering off self-conjugate $A=4n$ nuclei

S. Adachi, T. Kawabata, T. Furuno, T. Hashimoto, K. Inaba, M. Murata, T. Nanamura, M. Tsumura et al.

Phys. Rev. C 97, 014601 (2018)

Investigating neutron-proton pairing in sd -shell nuclei via $(p, ^3\text{He})$ and $(^3\text{He}, p)$ transfer reactions

Y. Ayyad, T. Kawabata et al.

Phys. Rev. C 96, 021303(R) (2017)

Observation of isoscalar and isovector dipole excitations in neutron-rich ^{20}O

N. Nakatsuka, T. Kawabata, T. Murakami

Phys. Lett. B 768, 387–392 (2017)

Neutron Detection Efficiency of the BC-501A Liquid Scintillation Detector

K. Kariya, T. Kawabata, A. Koshikawa, and A. Sakaue

ELCAS Journal 2, 39–42 (2017)

Single-neutron knockout from ^{20}C and the structure of ^{19}C

J. W. Hwang, T. Murakami, N. Nakatsuka et al.

Phys. Lett. B 769 (2017) 503-508

- Nonperturbative-transverse-momentum effects and evolution in dihadron and direct photon-hadron angular correlations in $p + p$ collisions at $\sqrt{s} = 510$ GeV
PHENIX Collaboration (A. Adare, T. Murakami, T. Nagae et al.)
Phys. Rev. D 95 (2017) 072002
- Pion production in rare-isotope collisions
S π RIT collaboration (M. B. Tsang, T. Murakami et al.)
Phys. Rev. C 95 (2017) 044614
- Measurements of $B \rightarrow J/\psi$ at forward rapidity in $p + p$ collisions at $\sqrt{s} = 510$ GeV
PHENIX Collaboration (A. Adare, T. Murakami, T. Nagae et al.)
Phys. Rev. D 95 (2017) 092002
- Angular decay coefficients of J/ψ mesons at forward rapidity from $p + p$ collisions at $\sqrt{s} = 510$ GeV
PHENIX Collaboration (A. Adare, T. Murakami et al.)
Phys. Rev. D 95 (2017) 092003
- Cross section and transverse single-spin asymmetry of muons from open heavy-avor decays in polarized $p + p$ collisions at $\sqrt{s} = 200$ GeV
PHENIX Collaboration (C. Aidala, T. Murakami, T. Nagae et al.)
Phys. Rev. D 95 (2017) 112001
- Measurements of e^+e^- pairs from open heavy avor in $p + p$ and $d + \text{Au}$ collisions at $\sqrt{s_{NN}} = 200$ GeV
PHENIX Collaboration (A. Adare, T. Murakami et al.)
Phys. Rev. C 96 (2017) 024907
- B-meson production at forward and backward rapidity in $p + p$ and Cu+Au collisions at $\sqrt{s_{NN}} = 200$ GeV
PHENIX Collaboration (C. Aidala, T. Murakami et al.)
Phys. Rev. C 96 (2017) 064901
- Measurements of azimuthal anisotropy and charged-particle multiplicity in $d + \text{Au}$ collisions at $\sqrt{s_{NN}} = 200, 62.4, 39,$ and 19.6 GeV
PHENIX Collaboration (C. Aidala, T. Murakami et al.)
Phys. Rev. C 96 (2017) 064905
- Nuclear dependence of the transverse-single-spin asymmetry for forward neutron production in polarized $p + A$ collisions at $\sqrt{s_{NN}} = 200$ GeV
PHENIX Collaboration (C. Aidala, T. Murakami et al.)
Phys. Rev. Lett. 120 (2018) 022001
- Multi-layer plastic scintillation detector for intermediate- and high-energy neutrons with n- γ discrimination capability
L. Yu, H. Fujioka, A. Sakaue et al.
Nuclear Instruments and Methods in Physics Research Section A
886 (2017) 118-128

- ϕ photoproduction on the proton at $E_\gamma = 1.5 - 2.9$ GeV
LEPS Collaboration (K. Mizutani, M. Niiyama, T. Hashimoto et al.)
Phys. Rev. C 96, 062201(R) (2017)
- Photoproduction of Λ and Σ^0 hyperons off protons with linearly polarized photons at $E_\gamma = 1.5 - 3.0$ GeV
LEPS Collaboration (S. H. Shiu, K. Mizutani, M. Niiyama et al.)
Phys. Rev. C 97, 015208 (2018)
- First measurement of coherent ϕ -meson photoproduction from ${}^4\text{He}$ near threshold
LEPS Collaboration (T. Hiraiwa, M. Niiyama, K. Mizutani et al.)
Phys. Rev. C 97, 035208 (2018)
- Nuclear-matter radius studies from ${}^{58}\text{Ni}(\alpha, \alpha)$ experiments at the GSI Experimental Storage Ring with the EXL facility
J. C. Zamora, T. Furuno et al.
Phys. Rev. C 96, 034617 (2017)
- 宇宙元素合成におけるリチウム7問題
川畑貴裕, 嶋達志
パリティ 2018年1月号
- 宇宙リチウム問題の解決を目指して -原子核物理学からのアプローチ-
川畑貴裕, 久保野茂
日本物理学会誌 2018年1月号
- 宇宙誕生の謎に挑んだ大学生たち —ビッグバン元素合成研究の重要な核反応の測定にはじめて成功
川畑貴裕
化学 72, 12—16 (2017)
- Spectroscopy of Nuclei with Multi-Strangeness by Using New S-2S Spectrometer at J-PARC
T. Gogami, H. Ekawa, H. Fujioka, S. Kanatsuki, T. Nagae, T. Nanamura, M. Naruki et al.
JPS Conf. Proc. 18, 011031 (2017)
- The First Gamma-ray Spectroscopic Study of sd-shell Hypernucleus, ${}_{\Lambda}^{19}\text{F}$
S. B. Yang, H. Ekawa, S. Kanatsuki, T. Nagae et al.
JPS Conf. Proc. 17, 012004 (2017).
- Status of K^-pp Search Experiments
T. Nagae
JPS Conf. Proc. 17, 081001 (2017)
- Spectroscopic Study of Hyperon Resonance Below $\bar{K}N$ Threshold via the $d(K^-, n)$ Reaction
K. Inoue, H. Fujioka, T. Nagae et al.
JPS Conf. Proc. 17, 072003 (2017)

Construction Status of a New Spectrometer “S-2S” for Spectroscopy of Multi-Strangeness Systems at J-PARC

S. Kanatsuki, H. Ekawa, T. Nagae et al.

JPS Conf. Proc. 17, 033008 (2017)

Search for Excited State of Σ Hypernucleus in the J-PARC E13 Experiment

M. Nakagawa, H. Ekawa, S. Kanatsuki, T. Nagae et al.

JPS Conf. Proc. 17, 012009 (2017)

Gamma-ray Spectroscopy of Hypernuclei —Recent Results and Prospect at J-PARC—

J-PARC E13 Collaboration (H. Tamura, H. Ekawa, S. Kanatsuki, T. Nagae et al.)

JPS Conf. Proc. 17, 011004 (2017)

Search for η' Mesic Nuclei in GSI/FAIR

η -PRiME/Super-FRS Collaboration (K. Itahashi, H. Fujioka, T. Nagae et al.)

JPS Conf. Proc. 17, 082008 (2017)

Spectroscopic Experiment of $\Lambda(1405)$ via the In-flight $d(K^-, n)$ Reaction at J-PARC K1.8BR

J-PARC E31 Collaboration (S. Kawasaki, H. Fujioka, T. Nagae et al.)

JPS Conf. Proc. 13, 020018 (2017)

Study of the \bar{K} -Nucleus Interaction by Using the $^{12}\text{C}(K^-, p)$ Reaction at J-PARC

Y. Ichikawa, H. Ekawa, S. Kanatsuki, T. Nagae, T. Nanamura, M. Naruki et al.

JPS Conf. Proc. 13, 020007 (2017)

Excitation Spectra of Carbon Nuclei near η' Emission Threshold

η -PRiME/Super-FRS Collaboration (K. Itahashi, H. Fujioka, T. Nagae et al.)

JPS Conf. Proc. 13, 020030 (2017)

A Neutron Detector with Submicron Spatial Resolution using Fine-grained Nuclear Emulsion

N. Naganawa, T. Nagae et al.,

Phys. Procedia 88, 224 (2017)

High Statistics Σp Scattering Experiment Using High Intensity Pion Beams at J-PARC

K. Miwa, M. Naruki et al.

JPS Conf. Proc. 17, 041002 (2017)

Measurement of the Vector Meson Spectral Modification in the Nuclear Medium at J-PARC

J-PARC E16 Collaboration (Y. Komatsu, S. Ashikaga, M. Naruki et al.)
JPS Conf. Proc. 13, 020005 (2017)

Direct measurement of the ${}^7\text{Be}(n, \alpha){}^4\text{He}$ reaction cross sections for the cosmological Li problem

T. Kawabata, Y. Fujikawa, T. Furuno, T. Hashimoto, M. Ichikawa, A. Koshikawa, K. Mizutani, M. Murata, T. Nanamura, A. Sakaue, Y. Takahashi, T. Takeda, M. Tsumura, K. Watanabe
E3S Web of Conferences 163, 00028 (2017)

Measurement of the cross section for the ${}^4\text{He}(\alpha, n){}^7\text{Be}$ reaction as a possible solution to the cosmological lithium problem

T. Kawabata, T. Furuno, M. Ichikawa, A. Koshikawa, M. Murata, T. Nanamura, Y. Takahashi, T. Takeda, M. Tsumura, K. Watanabe et al.
J. Phys.: Conf. Ser. 863, 012073 (2017).

Double Hypernuclei Search Experiment with Hybrid Emulsion Method at J-PARC (J-PARC E07)

H. Ekawa and J-PARC E07 Collaboration
JPS Conf. Proc. 17, 033002 (2017)

The New Stage Of $S = -2$ Hypernuclear Study Opened With A New High-resolution Spectrometer

S. Kanatsuki, H. Ekawa, T. Nagae, T. Nanamura et al.
PoS INPC2016 (2017) 081

Search For A Ξ Bound State in The ${}^{12}\text{C}(K^-, K^+)X$ Reaction At 1.8 GeV/c in J-PARC

T. Nagae, H. Ekawa, S. Kanatsuki, T. Nanamura, M. Naruki et al.
PoS INPC2016 (2017) 038

Active target MAIKo to investigate cluster structures in unstable nuclei

T. Furuno, T. Kawabata, M. Murata, T. Hashimoto, R. Kobayakawa, T. Nanamura, A. Sakaue, M. Tsumura et al.
Journal of Physics: Conference Series 863 (2017) 012076.

The measurement of ${}^4\text{He}$ photodisintegration with MAIKo active target

M. Murata, T. Furuno, T. Kawabata, M. Tsumura et al.
J. Phys.: Conf. Ser. 863, 012077 (2017)

Development of multi wire drift chambers and the readout system for focal-plane tracking detectors in BigRIPS

S. Y. Matsumoto, H. Fujioka, T. Kawabata, A. Sakaue et al.
RIKEN Nishina Center Accelerator Progress Report. 2016, 50, 091 (2017)

CERN Summer Student Programme 2017 参加報告

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