

## List of Preprints (April 2021—March 2022)

## RIKEN NC-NP

Not Applicable

## RIKEN NC-AC

7 First Beam from SRILAC

O. Kamigaito *et al.*

## RIKEN MP

Not Applicable

## RIKEN QHP

494	Photonic quantum kinetic theory in curved spacetime and the spin Hall effect	K. Mameda <i>et al.</i>
495	Complex Langevin study for polarons in an attractively interacting one-dimensional two-component Fermi gas	T. M. Doi <i>et al.</i>
496	Emergence of the rho resonance from the HAL QCD potential in lattice QCD	Y. Akahoshi <i>et al.</i>
497	Quantum hydrodynamics from local thermal pure states	S. Tsutsui <i>et al.</i>
498	Unitary p-wave Fermi gas in one dimension	H. Tajima <i>et al.</i>
499	Effects of finite-light-speed correction for the Coulomb interaction on nuclear binding energies and radii in spherical nuclei	T. Naito
500	Three-body crossover from a Cooper triple to bound trimer state in three-component Fermi gases near a triatomic resonance	H. Tajima <i>et al.</i>
501	Construction of energy density functional for arbitrary spin polarization using functional renormalization group	T. Yokota and T. Naito
502	New constraints on the neutron-star mass and radius relation from the terrestrial nuclear experiments	H. Sotani <i>et al.</i>
503	Persistence of cluster structure in the ground state of $^{11}\text{B}$	N. Itagaki <i>et al.</i>
504	Optical spin transport theory of spin-1/2 topological Fermi superfluids	H. Tajima <i>et al.</i>
505	Perturbative predictions for color superconductivity on the lattice	T. Yokota <i>et al.</i>
506	Color superconductivity in a small box: a complex	S. Tsutsui <i>et al.</i>
507	On the validity of the complex Langevin method near the deconfining phase transition in QCD at finite density	S. Tsutsui <i>et al.</i>
508	Isvector density and isospin impurity in $^{40}\text{Ca}$	H. Sagawa <i>et al.</i>
509	Investigations of decuplet baryons from meson-baryon interactions in the HAL QCD method	K. Murakami <i>et al.</i>
510	Flavor number dependence of QCD at finite density by the complex Langevin method	Y. Namekawa <i>et al.</i>
511	Emergence of the rho resonance from the HAL QCD potential	Y. Akahoshi <i>et al.</i>
512	Most charming dibaryon near unitarity	Y. Lyu <i>et al.</i>
513	Finite volume analysis on systematics of the derivative expansion in HAL QCD method	T. Doi <i>et al.</i>
514	Optimized two-baryon operators in lattice QCD	Y. Lyu <i>et al.</i>

515 Isospin symmetry breaking in the charge radius difference of mirror nuclei

T. Naito *et al*

## CNS-REP

100 CNS Annual Report 2020

H. Nagahama

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