

7.1 PUBLICATIONS

JOURNALS

Experimental Researches

1. *E949 Collaboration*

A.V. Artamonov, B. Bassalleck, B. Bhuyan, E.W. Blackmore, D.A. Bryman, S. Chen, I.-H. Chiang, I.-A. Christidi, P.S. Cooper, M.V. Diwan, J.S. Frank, T. Fujiwara, J. Hu, D.E. Jaffe, S. Kabe, S.H. Kettell, M.M. Khabibullin, A.N. Khotjantsev, P. Kitching, M. Kobayashi, T.K. Komatsubara, A. Konaka, A.P. Kozhevnikov, Yu.G. Kudenko, A. Kushnirenko, L.G. Landsberg, B. Lewis, K.K. Li, L.S. Littenberg, J.A. Macdonald, J. Mildenerger, O.V. Mineev, M. Miyajima, K. Mizouchi, V.A. Mukhin, N. Muramatsu, T. Nakano, M. Nomachi, T. Nomura, T. Numao, V.F. Obraztsov, K. Omata, D.I. Patalakha, S.V. Petrenko, R. Poutissou, E.J. Ramberg, G. Redlinger, T. Sato, T. Sekiguchi, T. Shinkawa, R.C. Strand, S. Sugimoto, Y. Yamagawa, R. Tschirhart, T. Tsunemi, D.V. Vavilov, B. Viren, N.V. Yershov, Y. Yoshimura, T. Yoshioka

Phys. Lett. **B623** (2005) 192-199

Search for the decay $K^+ \rightarrow \pi^+ \gamma \gamma$ in the π^+ momentum region $P > 213$ MeV/c

2. *E949 Collaboration*

A.V. Artamonov, B. Bassalleck, B. Bhuyan, E.W. Blackmore, D.A. Bryman, S. Chen, I.-H. Chiang, I.-A. Christidi, P.S. Cooper, M.V. Diwan, J.S. Frank, T. Fujiwara, J. Hu, D.E. Jaffe, S. Kabe, S.H. Kettell, M.M. Khabibullin, A.N. Khotjantsev, P. Kitching, M. Kobayashi, T.K. Komatsubara, A. Konaka, A.P. Kozhevnikov, Yu.G. Kudenko, A. Kushnirenko, L.G. Landsberg, B. Lewis, K.K. Li, L.S. Littenberg, J.A. Macdonald, J. Mildenerger, O.V. Mineev, M. Miyajima, K. Mizouchi, V.A. Mukhin, N. Muramatsu, T. Nakano, M. Nomachi, T. Nomura, T. Numao, V.F. Obraztsov, K. Omata, D.I. Patalakha, S.V. Petrenko, R. Poutissou, E.J. Ramberg, G. Redlinger, T. Sato, T. Sekiguchi, T. Shinkawa, R.C. Strand, S. Sugimoto, Y. Yamagawa, R. Tschirhart, T. Tsunemi, D.V. Vavilov, B. Viren, N.V. Yershov, Y. Yoshimura, T. Yoshioka

Phys. Rev. **D72** (2005) 091102

Upper limit on the branching ratio for the decay $\pi^0 \rightarrow \nu \bar{\nu}$

3. *F. Atchison, K. Bodek, B. van den Brandt, T. Bryś, M. Daum, P. Fierlinger, P. Geltenbolt, M. Giersch, P. Hautle, M. Hino, R. Henneck, M. Kasprzak, K. Kirch, J. Kohlbrecher, J.A. Konter, G. Kühne, M. Kuźniak, K. Mishima, A. Pichlmaier, D. Rätz, A. Serebrov, M. Utsuro, A. Wokaun, J. Zmeskal*
- Journal of Research of the National Institute of Standards and Technology **110** (2005) 491-494

Investigation of solid D₂ for UCN sources

4. *F. Binon, A.M. Blik, S.V. Donskov, S. Inaba, V.N. Kolosov, A.A. Lednev, V.A. Lishin, Yu.V. Mikhailov, J.P. Peigneux, V.A. Polyakov, S.A. Sadovsky, V.D. Samoilenko, A.E. Sobol, J.P. Stroot, V.P. Sugonyaev, K. Takamatsu, T. Tsuru, I. Fujita, G.V. Khauskov, H. Shimizu, and Y. Yasu*
- Physics of Atomic Nuclei **63** (2005) 960-973

Investigation of the $\eta\eta$ system in the $\pi^- p$ interactions at a momentum of 32.5 GeV/c at the GAMS-4 π spectrometer

5. *M. Doroshenko, K. Abe, J.K. Ahn, Y. Akune, V. Baranov, Y. Fujioka, Y.B. Hsiung, T. Ikei, T. Inagaki, S. Ishibashi, H. Ishii, T. Iwata, S. Kobayashi, S. Komatsu, T.K. Komatsubara, A. Kurilin, E. Kuzmin, A. Lednev, H.S. Lee, S.Y. Lee, G.Y. Lim, T. Matsumura, T. Mizuhashi, A. Moiseenko, T. Morimoto, T. Nakano, N. Nishi, J. Nix, T. Nomura, T. Oba, H. Okuno, K. Omata, G.N. Perdue, S. Perov, S. Podolsky, S. Porokhovoy, K. Sakashita, N. Sasao, H. Sato, T. Sato, M. Sekimoto, T. Ishikawa, Y. Sugaya, A. Sugiyama, T. Sumida, Y. Tajima, Z. Tsamalaidze, T. Tsukamoto, Y. Wah, H. Watanabe, M. Yamada, Y. Yamanaka, H.Y. Yoshida, Y. Yoshimura*
 Nucl. Instrum. Meth. **A545** (2005) 278-295
 Undoped CsI calorimeter for the $K_L^0 \rightarrow \pi^0 \nu \bar{\nu}$ experiment at KEK-PS

6. *H. Ejiri*
 Journal of the Physical Society of Japan **74** (2005) 2101-2127
 Double beta decays and neutrino masses

7. *Y. Fujita, T. Adachi, P.von Brentano, G.P.A. Berg, C. Fransen, D.De Frenne, H. Fujita, K. Fujita, K. Hatanaka, E. Jacobs, K. Nakanishi, A. Negret, N. Pietralla, L. Popescu, B. Rubio, Y. Sakemi, Y. Shimbara, Y. Shimizu, Y. Tameshige, A. Tamii, M. Yosoi, and K.O. Zell*
 Phys. Rev. Lett. **95** (2005) 212501
 Gamow-Teller strengths in proton-rich exotic nuclei deduced in the combined analysis of mirror transitions

8. *J. Guillot, S. Galès, D. Beaumel, S. Fortier, E. Rich, N. Van Giai, G. Colò, A.M. van den Berg, S. Brandenburg, B. Davids, M.N. Harakeh, M. Hunyadi, S.Y. van der Werf, H.J. Wörtche, C. Bäumer, D. Frekers, E.-W. Grewe, P. Haefner, B.C. Junk and M. Fujiwara*
 Phys. Rev. **C73** (2006) 014616 (12 pages)
 The (t, ^3He) reaction at 43 MeV/u on ^{48}Ca and ^{58}Ni : results and microscopic interpretation

9. *M. Hatano, H. Sakai, T. Wakui, T. Uesaka, N. Aoi, Y. Ichikawa, T. Ikeda, K. Itoh, H. Iwasaki, T. Kawabata, H. Kuboki, Y. Maeda, N. Matsui, T. Ohnishi, T.K. Onishi, T. Saito, N. Sakamoto, M. Sasao, Y. Satou, K. Sekiguchi, K. Suda, A. Tamii, Y. Tanagisawa and K.Yako*
 European Physical Journal **A25** (2005) 255-258 Suppl.
 First experiment of ^6He with a polarized proton target

10. *T. Ishikawa, D.S. Ahn, J.K. Ahn, H. Akimune, W.C. Chang, S. Daté, H. Fujimura, M. Fujiwara, K. Hicks, T. Hotta, K. Imai, H. Kawai, K. Kino, H. Kohri, T. Matsumura, T. Mibe, K. Miwa, M. Miyabe, M. Morita, T. Murakami, N. Muramatsu, H. Nakamura, M. Nakamura, T. Nakano, M. Niiyama, M. Nomachi, Y. Ohashi, T. Ooba, D.S. Oshuev, C. Rangacharyulu, A. Sakaguchi, Y. Shiino, Y. Sakemi, H. Shimizu, Y. Sugaya, M. Sumihama, Y. Toi, H. Toyokawa, C.W. Wang, T. Yorita, M. Yosoi, R.G.T. Zegers*
 Phys. Lett. **B608** (2005) 215-222
 ϕ photo-production from Li,C,Al, and Cu Nuclei at $E_\gamma=1.5\text{-}2.4$ GeV

11. *T. Kii, T. Shima, T. Baba, Y. Nagai*
Nucl. Instrum. Meth. **A552** (2005) 329-343
A time projection chamber for the study of nuclear photodisintegration
12. *T. Kishimoto, T. Hayakawa, S. Ajimura, S. Minami, A. Sakaguchi, Y. Shimizu, R.E. Chrien, M. May, P. Pile, A. Rusek, R. Sutter, H. Noumi, H. Tamura, M. Ukai, Y. Miura and K. Tanida*
Nucl. Phys. **A754** (2005) 383-390
Kaonic Nuclei Probed by the in-flight (K^- , N) Reaction
13. *H. Makii, K. Mishima, M. Segawa, E. Sano, H. Ueda, T. Shima, Y. Nagai, M. Igashira, and T. Ohsaki*
Nucl. Instr. Meth. **A547** (2005) 411-423
Measurement system of the γ -ray angular distribution of the $^{12}\text{C}(\alpha, \gamma)^{16}\text{O}$ reaction
14. *G.J. Mathews, T. Kajino, T. Shima*
Phys. Rev. **D71** (2005) 021302
Big bang nucleosynthesis with a new neutron lifetime
15. *LEPS Collaboration*
T. Mibe, W.C. Chang, T. Nakano, D.S. Ahn, J.K. Ahn, H. Akimune, Y. Asano, S. Daté, H. Ejiri, H. Fujimura, M. Fujiwara, K. Hicks, T. Hotta, K. Imai, T. Ishikawa, T. Iwata, H. Kawai, Z.Y. Kim, K. Kino, H. Kohri, N. Kumagai, S. Makino, T. Matsuda, T. Matsumura, N. Matsuoka, K. Miwa, M. Miyabe, Y. Miyachi, M. Morita, N. Muramatsu, M. Niiyama, M. Nomachi, Y. Ohashi, T. Ooba, H. Ohkuma, D.S. Oshuev, C. Rangacharyulu, A. Sakaguchi, T. Sasaki, P.M. Shagin, Y. Shiino, H. Shimizu, Y. Sugaya, M. Sumihama, A.I. Titov, Y. Toi, H. Toyokawa, A. Waku, C.W. Wang, S.C. Wang, K. Yonehara, T. Yorita, M. Yoshimura, M. Yosoi and R.G.T. Zegers
Phys. Rev. Lett. **95** (2005) 182001
Near-Threshold diffractive ϕ -meson photoproduction from the proton
16. *Y. Nagai, M. Igashira, T. Takaoka, T. Kikuchi, T. Shima, A. Tomyo, A. Mengoni, and T. Otsuka*
Phys. Rev. **C71** (2005) 055803
 $^7\text{Li}(n, \gamma)^8\text{Li}$ reaction and the S_{17} factor at $E_{c.m.} > 500$ KeV
17. *S. Nakayama, T. Yamagata, H. Akimune, Y. Arimoto, H. Daito, H. Ejiri, H. Fujiwara, Y. Fujita, M. Fujiwara, K. Fushimi, M.B. Greenfield, H. Kohri, N. Koori, K. Takahisa, T. Takeuchi, M. Tanaka, K. Yonehara, and H.P. Yoshida*
Phys. Rev. **C72** (2005) 041001
M1 cross section for the photodisintegration of deuterium using the $^2\text{H}(^7\text{Li}, ^7\text{Be})$ reaction
18. *B.K. Nayak, U. Garg, M. Hedden, M. Koss, T. Li, Y. Liu, P.V. Madhusudhana Rao, S. Zhu, M. Itoh, H. Sakaguchi, H. Takeda, M. Uchida, Y. Yasuda, M. Yosoi, H. Fujimura, M. Fujiwara, K. Hara, T. Kawabata, H. Akimune and M.N. Harakeh*
Phys. Lett. **B637** (2006) 43-47
"Bi-modal" Isoscalar Giant Dipole Strength in ^{58}Ni

19. *A. Negret, T. Adachi, C. Bäumer, A.M.van den Berg, G.P.A. Berg, P.von Brentano, D. Frekers, D.De Frenne, K. Fujita, Y. Fujita, E-W Grewe, P. Haefner, K. Hatanaka, M. Hunyadi, E. Jacobs, A. Korff, K. Nakanishi, L. Popescu, S. Rakers, Y. Sakemi, Y. Shimbara, Y. Shimizu, Y. Tameshige, A. Tamii, M. Uchida, H.J. Wörtche, and M. Yosoi*
Journal of Physics G-Nuclear and Particle Physics **31** (2005) S1931-S1934 Suppl.
High resolution study of the Gamow-Teller strength distribution starting from the ground state of ^{14}N in the β^- and β^+ directions
20. *A. Negret, T. Adachi, G.P.A. Berg, P.von Brentano, H. Fraiquin, D.De Frenne, H. Fujita, K. Fujita, Y. Fujita, K. Hatanaka, E. Jacobs, K. Nakanishi, L. Popescu, Y. Sakemi, Y. Shimbara, Y. Shimizu, Y. Tameshige, A. Tamii, M. Uchida, and M. Yosoi*
Phys. Rev. **C71** (2005) 047303
Level widths of ^{14}O states studied in the high-resolution $^{14}\text{N}(^3\text{He,t})^{14}\text{O}$ reaction
21. *T. Noro, T. Yonemura, S. Asaji, N.S. Chant, K. Fujita, Y. Hagihara, K. Hatanaka, G.C. Hillhouse, T. Ishida, M. Itoh, S. Kishi, M. Nakamura, Y. Nagasue, H. Sakaguchi, Y. Sakemi, Y. Shimizu, H. Takeda, Y. Tameshige, S. Terashima, M. Uchida, T. Wakasa, Y. Yasuda, H.P. Yoshida, and M. Yosoi*
Phys. Rev.**C72** (2005) 041602
Analyzing powers for exclusive $1s_{1/2}$ proton knockout from light nuclei
22. *L. Popescu, T. Adachi, G.P.A. Berg, P.von Brentano, D.De Frenne, K. Fujita, Y. Fujita, K. Hatanaka, E. Jacobs, A. Negret, K. Nakanishi, Y. Sakemi, Y. Shimbara, Y. Shimizu, Y. Tameshige, A. Tamii, M. Uchida, and M. Yosoi*
Journal of Physics G-Nuclear and Particle Physics **31** (2005) S1945-S1948 Suppl.
Gamow-Teller transitions in the $^{64}\text{Ni}(^3\text{He,t})^{64}\text{Cu}$ reaction
23. *M. Segawa, A. Tomyo, Y. Nagai, Y. Tamma, T. Masaki, T. Shima, J. Nishiyama, T. Ohsaki, and M. Igashira*
Journal of Physical Society of Japan **74** (2005) 2981-2986
New approach for measuring the (n, γ) cross section of a nucleus by a few keV neutron
24. *K. Sekiguchi, H. Sakai, H. Witala, W. Glöckle, J. Golak, K. Hatanaka, M. Hatano, K. Itoh, H. Kamada, H. Kuboki, Y. Maeda, A. Nogga, H. Okamura, T. Saito, N. Sakamoto, Y. Sakemi, M. Sasano, Y. Shimizu, K. Suda, A. Tamii, T. Uesaka, T. Wakasa, and K. Yako*
Phys. Rev. Lett.**95** (2005) 162301
Resolving the discrepancy of 135 MeV pd elastic scattering cross sections and relativistic effects
25. *T. Shima, S. Naito, T. Baba, K. Tamura, T. Takahashi, T. Kii, H. Ohgaki, H. Toyokowa*
Phys. Rev. **72** (2005) 044004
Simultaneous measurement of the photodisintegration of ^4He in the giant dipole resonance region

26. *M. Sumihama, J. K. Ahn, H. Akimune, Y. Asano, C. Bennhold, W. C. Chang, T. Corthals, S. Date, H. Ejiri, H. Fujimura, M. Fujiwara, M. Guidal, K. Hicks, T. Hotta, K. Imai, T. Ishikawa, T. Iwata, H. Kawai, Z. Y. Kim, K. Kino, H. Kohri, N. Kumagai, S. Makino, T. Mart, T. Matsumura, N. Matsuoka, T. Mibe, M. Miyabe, Y. Miyachi, M. Morita, N. Muramatsu, T. Nakano, M. Niiyama, M. Nomachi, Y. Ohashi, T. Ooba, H. Ohkuma, D. S. Oshuev, C. Rangacharyulu, A. Sakaguchi, T. Sasaki, P. M. Shagin, Y. Shiino, H. Shimizu, Y. Sugaya, H. Toyokawa, A. Wakai, C. W. Wang, S. C. Wang, K. Yonehara, T. Yorita, M. Yosoi and R. G. T. Zegers*
 Phys. Rev. **C73** (2006) 035214 (12 pages)
 The $\gamma p \rightarrow K + \Lambda$ and $\gamma p \rightarrow K + \Sigma 0$ reactions at forward angles with photon energies from 1.5 to 2.4 GeV
27. *M. Tanaka, Yu. A. Plis, E. D. Donets, N. Shimakura, Y. Arimoto, T. Yamagata, and K. Yonehara*
 Nucl. Instrum. Meth. **A537** (2005) 501-509
 Polarized ${}^3\text{He}^{2+}$ ion source based on spin-exchange collisions between ${}^3\text{He}^+$ ion and polarized Rb atoms
28. *S. Taniguchi, T. Moriya, M. Tanaka, K. Hatanaka, T. Wakasa, T. Saito*
 Radiation Protection Dosimetry **116** (2005) 175-179
 Measurement of the response functions of a large size NE213 organic liquid scintillator for neutrons up to 800 MeV
29. *A.I. Titov, M. Fujiwara and K. Kawase*
 J. Phys. G: Nucl. Part. Phys. **32** (2006) 1097-1103
 Parity non-conservation in Nuclear excitation by circularly polarized photon beam
30. *A. Tomyo, Y. Temma, M. Segawa, Y. Nagai, H. Makii, T. Shima, T. Ohsaki, and M. Igashira*
 Astrophysical Journal **623** (2005) L153-L156
 ${}^{62}\text{Ni}(n,\gamma){}^{63}\text{Li}$ reaction and overproduction of Ni isotopes
31. *T. Wakasa, Y. Hagihara, M. Sasano, S. Asaji, K. Fujita, K. Hatanaka, T. Ishida, T. Kawabata, H. Kuboki, Y. Maeda, T. Noro, T. Saito, H. Sakai, Y. Sakemi, K. Sekiguchi, Y. Shimizu, A. Tamii, Y. Tameshige, K. Yako*
 Nucl. Instrum. Meth. **547** (2005) 569-582
 Performance of the neutron polarimeter NPOL3 for high resolution measurements
32. *T. Wakui, M. Hatano, H. Sakai, T. Uesaka, A. Tamii*
 Nucl. Instrum. Meth. **A550** (2005) 521-534
 Proton polarizing system with Ar-ion laser for \vec{p} - RI scattering experiments
33. *K. Yako, H. Sakai, M.B. Greenfield, K. Hatanaka, M. Hatano, J. Kamiya, H. Kato, Y. Kitamura, Y. Maeda, C.L. Morris, H. Okamura, J. Rapaport, T. Saito, Y. Sakemi, K. Sekiguchi, Y. Shimizu, K. Suda, A. Tamii, N. Uchigashima, T. Wakasa*
 Phys. Lett. **B615** (2005) 193-199
 Determination of the Gamow-Teller quenching factor from charge exchange reaction on ${}^{90}\text{Zr}$

34. *T. Yamagata, H. Akimune, S. Nakayama, M. Fujiwara, K. Fushimi, M. B. Greenfield, K. Hara, K. Y. Hara, H. Hashimoto, K. Ichihara, K. Kawase, M. Kinoshita, Y. Matsui, K. Nakanishi, M. Ohta, A. Shiokawa, M. Tanaka, H. Utsunomiya, and M. Yoso*
 Phys. Rev. **C71** (2005) 064316, 1-7
 Di-trinucleon cluster resonances in $A=6$ isobar nuclei
35. *T. Yamagata, S. Nakayama, M. Tanaka, and T. Itahashi*
 J. Phys. Soc. Jpn. **74** (2005) 2640-2641
 ${}^7\text{Li}$ -Excitation of a Resonance at $E_x=15.5$ MeV in ${}^{208}\text{Pb}$

Theoretical Researches

1. *S. Banerjee, A. Bhattacharyya, S.K. Ghosh, E.-M. Ilgenfritz, S. Raha, B. Sinha, E. Takasugi, H. Toki*
 Phys. Lett. **B611** (2005) 27-33
 Cosmological dark energy from the cosmic QCD phase transition and colour entanglement
2. *L.S. Geng, H. Toki, J. Meng*
 Prog. Theor. Phys. **113** (2005) 785-800
 Masses, deformations and charge radii - Nuclear ground-state properties in the relativistic mean field model
3. *A. Haga, H. Toki, S. Tanenaga, Y. Horikawa, H.L. Yadav*
 Phys. Rev. **72** (2005) 034301
 Self-consistent relativistic random-phase approximation with vacuum polarization
4. *E. Hiyama, M. Kamimura, A. Hosaka, H. Toki and M. Yahiro*
 Phys. Lett. **B633** (2006) 237-244
 Five-body calculation of resonance and scattering states of pentaquark system
5. *A. Hosaka, M. Oka, T. Shinozaki*
 Phys. Rev. **D71** (2005) 074021
 Decay of Θ^+ in a quark model
6. *A. Hosaka, T. Hyodo, F.J. Llanes-Estrada, E. Oset, J. R. Peláez, M. J. Vicente Vacas*
 Phys. Rev. C **71** 045205 (2005)
 Two-meson cloud contribution to the baryon antidecuplet binding
7. *T. Hyodo and A. Hosaka*
 Phys. Rev. D **71** 054017 (2005)
 Phenomenology of spin 3/2 baryons with pentaquarks
8. *T. Hyodo and A. Hosaka*
 Phys. Rev. C **72** 055202 (2005)
 Phenomenological study of two-meson couplings of Θ^+

9. *M. Oka, J. Sugiyama and T. Doi*
Nucl. Phys. **A755** (2005) 391-394
Pentaquark Baryons in the QCD Sum Rule
Lattice construction of Cho-Faddeev-Niemi decomposition and gauge invariant monopole
10. *Y. Manabe, A. Hosaka, H. Toki*
J. Phys. G **31** (2005) 1183-1190 10pp.
Relationship between the separable and one-boson-exchange potential for the covariant Bethe-Salpeter equation
11. *H. Masui, T. Myo, K. Kato, K. Ikeda*
European Physical Journal **A25** (2005) 505-506 Suppl.
Study of drip-line nuclei with a core plus multi-valence nucleon model
12. *J. Meng, W. Zhang, S.G. Zhou, H. Toki, L.S. Geng*
European Physical Journal **A25** (2005) 23-27
Shape evolution for Sm isotopes in relativistic mean-field theory
13. *T. Myo, K. Kato, K. Ikeda*
Prog. Theor. Phys. **113** (2005) 763-783
Tensor correlation in ^4He and its effect on the doublet splitting in ^5He
14. *T. Myo, K. Kato, H. Toki, K. Ikeda*
J. Phys. G **31** (2005) S1681-S1685
Tensor correlation in He isotopes
15. *H. Nagahiro, D. Jido and S. Hirenzaki*
Nucl. Phys. **A761** (2005) 92-119
Formation of mesic nuclei by (γ, p) reactions
16. *H. Nagahiro and S. Hirenzaki*
Phys. Rev. Lett. **94** (2005) 232503
Formation of $\eta'(958)$ -mesic nuclei and axial $U_A(1)$ anomaly at finite density
17. *H. Nagahiro, S. Hirenzaki, E. Oset, M.J. Vicente Vacas*
Phys. Lett. **B620** (2005) 125-130
Production of Θ^+ hypernuclei with the (K^+, π^+) reaction
18. *K. Nagata, A. Hosaka and L. J. Abu-Raddad*
Phys. Rev. **C72** (2005) 035208
The mass of the nucleon in a chiral quark-diquark model
19. *S.I. Nam, A. Hosaka, H.C. Kim*
Phys. Rev. **D71** (2005) 114012
 $\Lambda(1520, 3/2^-)$ - photoproduction reaction via $\gamma N \rightarrow K \Lambda^*(1520)$
20. *T. Nomura, Y. Abe*
BUTSURI (JPS Journal, in Japanese) **60** No.9 (2005) 725-732
Fusion Reaction in the Superheavy Nuclear Region
21. *N. Nose-Togawa, H. Nagahiro, S. Hirenzaki, K. Kume*
Phys. Rev. **C71** (2005) 061601
Residual interaction effects on deeply bound pionic states in Sn and Pb isotopes

22. *Y. Ogawa, H. Toki, S. Tamenaga, S. Sugimoto, K. Ikeda*
Phys. Rev. **C73** (2006) 034301
Charge and parity projected relativistic mean field model with pion for finite nuclei
23. *S. Raha, S. Banerjee, A. Bhattacharyya, S.K. Ghosh, E.-M. Ilgenfritz, B. Sinha, E. Takasugi, H. Toki*
J. Phys. G **31** (2005) S857-S862
Strangeness, cosmological cold dark matter and dark energy
24. *H. Shen, H. Toki*
Phys. Rev. **C71** (2005) 065208
Pentaquark Θ^+ in nuclear matter and Θ^+ hypernuclei
25. *K. Sumiyoshi, S. Yamada, H. Suzuki, H. Shen, S. Chiba, H. Toki*
Astrophysical Journal **629** (2005) 922-932
Postbounce evolution of core-collapse supernovae: Long-term effects of the equation of state
26. *R. Suzuki, T. Myo, K. Kato*
Prog. Theor. Phys. **113** (2005) 1273-1286
Level density in the complex scaling method
27. *A.I. Titov, H. Ejiri, H. Haberzettl, K. Nakayama*
Phys. Rev. **C71** (2005) 035203
Some aspects of Θ^+ parity determination in the reaction $\gamma N \rightarrow \Theta^+ \bar{K} \rightarrow NK\bar{K}$
28. *H. Toki*
International Journal of Modern Physics **A20** (2005) 301-309
Deeply bound pionic atoms and finite pion mean field in nuclei
29. *S. Yasui, A. Hosaka, H. Toki*
Phys. Rev. **D71** (2005) 074021
Chiral symmetry breaking and stability of strangelets
30. *J. Yamagata, H. Nagahiro, Y. Okumura and S. Hirenzaki*
Prog. Theor. Phys. **114** (2005) 301-316
Formation of Kaonic Atoms and Kaonic Nuclei in In-Flight (K^-, p) Reactions
31. *W. Zhang, J. Meng, S.Q. Zhang, L.S. Geng, H. Toki*
Nucl. Phys. **A753** (2005) 106-135
Magic numbers for superheavy nuclei in relativistic continuum Hartree-Bogoliubov theory

Physics with supercomputer

1. *V.G. Bornyakov, M.N. Chernodub, H. Ichie, Y. Koma, Y. Mori, Y. Nakamura, M.I. Polikarpov, G. Schierholz, A.A. Slavnov, H. Stüben, T. Suzuki, P.V. Uvarov and A.I. Veselov*
Phys. Rev. **D71** (2005) 114504
Finite Temperature QCD with Two Flavors of Non-Perturbatively Improved Wilson Fermions

2. *M. N. Chernodub, K. Ishiguro and T. Suzuki*
Physics of Atomic Nuclei **68** (2005) 634
Monopoles in Gluodynamics and Blocking from Continuum to Lattice
3. *M. N. Chernodub, K. Ishiguro and T. Suzuki*
Phys. Rev. **D71** (2005) 094506
Entropy of spatial monopole currents in pure SU(2) QCD at finite temperature
4. *M. N. Chernodub, K. Ishiguro, Y. Mori, Y. Nakamura, M. I. Polikarpov, T. Sekido, T. Suzuki and V. I. Zakharov*
Phys. Rev. **D72** (2005) 074505
Vacuum type of SU(2) gluodynamics in maximally Abelian and Landau gauges
5. *T. Doi, N. Ishii, M. Oka and H. Suganuma*
Nucl. Phys. Proc. Suppl. **B140** (2005) 559-561
The Lattice QCD Simulation of the Quark-Gluon Mixed Condensate $g\langle\bar{q}\sigma_{\mu\nu}G_{\mu\nu}q\rangle$ at Finite Temperature and the Phase Transition of QCD
6. *H. Fukaya, S. Hashimoto and K. Ogawa*
Prog. Theor. Phys. **114** (2005) 451
Low-lying mode contribution to the quenched meson correlators in the epsilon-regime
7. *H. Iida, M. Oka and H. Suganuma*
European Physical Journal **A23** (2005) 305-315
Dynamical Chiral-Symmetry Breaking at T=0 and T>0 in the Schwinger-Dyson Equation with Lattice QCD Data
8. *N. Ishii, T. Doi, H. Iida, M. Oka, F. Okiharu and H. Suganuma*
Phys. Rev. **D71** (2005) 034001 (11 pages)
Penta-Quark Baryon in Anisotropic Lattice QCD
9. *N. Ishii, T. Doi, H. Iida, M. Oka, F. Okiharu and H. Suganuma*
Nucl. Phys. **A755** (2005) 467-470
Penta-Quark in Anisotropic Lattice QCD
10. *N. Ishii, T. Doi, H. Iida, M. Oka, F. Okiharu and H. Suganuma*
Nucl. Phys. Proc. Suppl. **B140** (2005) 269-271
Penta-Quark Anti-Decuplet in Anisotropic Lattice QCD
11. *N. Ishii, T. Doi, Y. Nemoto, M. Oka and H. Suganuma*
Phys. Rev. **D72** (2005) 074503 (15 pages)
Spin 3/2 Pentaquarks in Anisotropic Lattice QCD
12. *Y. Koma and M. Koma*
Nucl. Phys. **713** 575 (2005) [hep-lat/0406034]
On the finite size mass shift formula for stable particles
13. *S. Kato, K.-I. Kondo, T. Murakami, A. Shibata, T. Shinohara, S. Ito*
Phys. Lett. **B632** (2006) 326-332
Lattice construction of Cho-Faddeev-Niemi decomposition and gauge invariant monopole

14. *M. Matsuo, K. Mizuyama, and Y. Serizawa*
Phys. Rev. C **71** 064326 (2005)
Di-neutron correlation and soft dipole excitation in medium mass neutron-rich nuclei near drip-line
15. *A. Nakamura, T. Saito*
Phys. Lett. **B621** (2005) 171-175
QCD color interactions between two quarks
16. *A. Nakamura and S. Sakai*
Phys. Rev. Lett. **94** (2005) 072305
Transport Coefficients of Gluon Plasma
17. *H. Nemura, S. Shinmura, Y. Akaishi and Khin Swe Myint*
Phys. Rev. Lett. **94** (2005) 202502
Fully Coupled Channel Approach to Doubly Strange *s*-Shell Hypernuclei
18. *M. Oka, J. Sugiyama and T. Doi*
Nucl. Phys. **A755** (2005) 391-394
Pentaquark Baryons in the QCD Sum Rule
19. *F. Okiharu, H. Suganuma and T.T. Takahashi*
Phys. Rev. **D72** (2005) 014505
Detailed Analysis of the Tetraquark Potential and Flip Flop in SU(3) Lattice QCD
20. *F. Okiharu, H. Suganuma and T.T. Takahashi*
Phys. Rev. Lett. **94** (2005) 192001
First Study for the Pentaquark Potential in SU(3) Lattice QCD
21. *QCD-TARO Collaboration: I. Pushkina, Ph.de Forcrand, M. G. Perez, S. Kim, H. Matsufuru, A. Nakamura, I.-O. Stamatescu, T. Takaishi, T. Umeda*
Phys. Lett. **B609** (2005) 265-270
Properties of hadron screening masses at small baryonic density
22. *T. Suzuki, K. Ishiguro, Y. Mori and T. Sekido*
Phys. Rev. Lett. **94** (2005) 132001
Dual Meissner effect and magnetic displacement currents
23. *T.T. Takahashi, T. Umeda, T. Onogi and T. Kunihiro*
Phys. Rev. **D71** (2005) 114509
Search for the possible $S = +1$ pentaquark states in quenched lattice QCD

JOURNALS –In press, submitted and preprints–

Experimental Researches

1. *T. Kawabata, H. Akimune, H. Fujita, Y. Fujita, M. Fujiwara, K. Hara, K. Hatanaka, M. Itoh, Y. Kanada-En'yo, S. Kishi, K. Nakanishi, H. Sakaguchi, Y. Shimbara, A. Tamii, S. Terashima, M. Uchida, T. Wakasa, Y. Yasuda, H. P. Yoshida, and M. Yosoi*
preprint, nucl-ex/0512040 (2005)
 $2\alpha + t$ cluster structure in ^{11}B

2. *H. Monden, H. Suganuma, H. Ichie and H. Toki*
preprint, hep-ph/9701271 (1997)
Surface Tension in the Mixed Phase of QCD in the Dual Ginzburg-Landau Theory
3. *T. Sakai and H. Suganuma*
submitted; preprint, hep-ph/9708433 (1997)
H-dibaryon matter in the Skyrme model on a hypersphere
4. *Y. Tosaka, R. Takasu, H. Ehara, T. Uemura, H. Oka, S. Satoh, N. Matsuoka, and K. Hatanaka*
to be published in Jpn. J. Appl. Phys., 2006
Technology Trends of Soft Errors based on Accurate Estimation Method
5. *T. Uemura, Y. Tosaka, and S. Satoh*
to be published in Jpn. J. Appl. Phys., 2006
Neutron-Induced Soft-Error Simulation Technology for Logic Circuits

Theoretical Researches

1. *Y. Abe, G. Kosenko, C.W. Shen, B. Bouriquet, A. Marchix, D. Boilley and B. Giraud*
Proc. Frontiers in the Physics of Nuclei, to be published in Physics of Atomic Nuclei.
Fusion Hindrance and Synthesis of Superheavy Elements
2. *N. Ikezi, M. Asakawa, and Y. Tsue*
submitted; preprint, nucl-th/0510061 (2005)
Effects of mode-mode and isospin-isospin correlations on domain formation of disoriented chiral condensates
3. *Y. Koma and M. Koma*
preprint, hep-lat/0504009 (2005)
More on the finite size mass shift formula for stable particles
4. *K. Nagata and A. Hosaka*
preprint, hep-ph/0506193 (2005)
The two nucleon states in a chiral quark-diquark model
5. *E. Uzu and Y. Koike*
submitted (in printing), Prog. Theor. Phys. **115**, (2006)
Four-Body Faddeev-Yakubovsky Calculation Using the Finite Range Expansion Method
6. *B. Yilmaz, S. Ayik, Y. Abe, A. Gokalp, and O. Yilmaz*
submitted to Phys. Rev. E.
Method for numerical simulation of two-term exponentially correlated colored noise

Physics with supercomputer

1. *S. Kato, K.-I. Kondo, T. Murakami, A. Shibata, T. Shinohara*

e-Print Archive: [hep-ph/0504054](https://arxiv.org/abs/hep-ph/0504054)

Numerical evidence for the existence of a novel magnetic condensation in Yang-Mills theory

7.2 CONFERENCE PROCEEDINGS AND PRESENTATIONS

Experimental Researches

1. *H. Ejiri*
6th International Workshop on "Neutrino Factories & Superbeams"
Osaka University, Osaka, Japan, July 26 - August 1 (2004)
Nucl. Phys. B - Proc. Suppl. **149** (2005) 157-159
Majorana neutrino masses and neutrino-less double beta decays
2. *H. Ejiri*
The International Symposium on the "Origin of Matter and Evolution of Galaxies 2003",
Wako, Saitama, Japan, November 17-19 (2003)
World Scientific (2005) 111-122
Perspective of neutrino studies by neutrino-less double beta decays
3. *M. Fujiwara, K. Kawase and A.I. Titov*
AIP Conference Proceedings, Vol. 802, pp.246-249, (2005)
Parity non-conservation measurements with Photons at SPring-8
4. *J. Guillt, C. Bäumer, D. Beaumel, A.M. van den Berg, S. Brandenburg, G. Colò, B. Devids, S. Fortier, E.-W. Grewe, M. Fujiwara, S. Galès, P. Haefner, M.N. Harakeh, M. Hunyadi, M. de Huu, B.C. Junk, E. Rich, N. Van Giai, S.Y. van der Werf and H.J. Wörtche*
22nd International Nuclear Physics Conference
Goeteborg, Sweden, June 27 - July 2 (2004)
Nucl. Phys. **A752** (2005) 349C-352C
Investigation of isovector excitations via the $(t, {}^3\text{He})$ reaction at $E_t=43$ MeV/u
5. *R. Hazama*
The 2nd International Symposium on "Isotope Science and Engineering from Basics to Applications",
Nagoya University, Aichi, September, 21-23 (2005)
Separation of Calcium Isotopes with a Crown Ether for the Study of Double Beta Decay of ${}^{48}\text{Ca}$
6. *R. Hazama, P. Doe, H. Ejiri, S.R. Elliott, J. Engel, M. Finger, J.A. Formaggio, K. Fushimi, V. Gehman, A. Gorin, M. Greenfield, K. Ichikawa, Y. Ikegami, H. Ishii, T. Itahashi, P. Kavitov, V. Kekelidze, K. Kuroda, V. Kutsalo, I. Manouilov, K. Matsuoka, H. Nakamura, M. Nomachi, A. Para, K. Rielage, A. Rjazantsev, R.G.H. Robertson, Y. Shichijo, T. Shima, Y. Shimada, G. Shirkov, A. Sissakian, Y. Sugaya, A. Titov, V. Vatulin, O.E. Vilches, V. Voronov, J.F. Wilkerson, D.I. Will and S. Yoshida*
The 8th International Workshop on "Topics in Astroparticle and Underground Physics (TAUP2003)"
Seattle, WA, USA, September 5-9 (2003)
Nucl. Phys. B - Proc. Suppl. **138** (2005) 102-105
Spectroscopy of low energy solar neutrinos by MOON -Mo Observatory of Neutrinos-

7. *S. Hohara, M. Imamura, T. Kin, Y. Yamashita, D. Maki
F. Saiho, K. Ikeda, Y. Uozumi and M. Matoba*
International Conference on "Nuclear Data for Science and Technology"
Santa Fe, New Mexico, September 26 - October 1 (2004),
AIP Conference Proceedings, Vol. 769, pp.207-210, (2005)
Development of Gas Proportional Scintillation Counter for Light Heavy-Ion Detection
8. *T. Hotta*
Cracow Epiphany Conference on "Hadron Spectroscopy"
Cracow, Poland, January 6-8, (2005)
ACTA Physica Polonica **B36** (2005) 2173-2178
LEPS results on Θ^+
9. *T. Itabashi*
International Workshop on "Chiral Restoration in Nuclear Medium (Chiral05)",
Wako, February, 15-17 (2005)
Measurement of Proton Induced Pion Pair Production in Nuclei
10. *T. Kawabata*
The 16th International Spin Physics Symposium (SPIN2004),
Trieste, Italy, October 10-16 (2004),
World Scientific (2005) pp. 645
Isovector and isoscalar spin-flip $M1$ strengths in ^{11}B
11. *T. Kawabata for the RCNP E114, E137 and E207 Collaborations*
International Symposium on "Correlation Dynamics in Nuclei,"
Tokyo, Japan, January 31-February 4 (2005),
Journal of Physics: Conference Series **20**, 175 (2005)
Isoscalar and isovector spin-flip $M1$ strengths in ^{11}B
12. *T. Kin, S. Hohara, F. Saiho, K. Ikeda, K. Ichikawa, Y. Yamashita, M. Imamura,
G. Wakabayashi, N. Ikeda, Y. Uozumi, M. Matoba and N. Koori*
International Conference on "Nuclear Data for Science and Technology"
Santa Fe, New Mexico, September 26 - October 1 (2004)
AIP Conference Proceedings, Vol. 769, pp.207-210, (2005)
Proton Production Cross Sections for Reactions Induced by 300- and 392-MeV
Protons
13. *K. Kobayashi, Y. Itow, M. Shinozawa, M. Yosoi, H. Toyokawa, H. Akimune, H. Ejiri,
H. Fujimura, M. Fujiwara, K. Hara, K.Y. Hara, T. Ishikawa, M. Itoh, T. Kawabata,
M. Nakamura, H. Sakaguchi, Y. Sakemi, H. Takeda, M. Uchida, T. Yamada,
Y. Yasuda, H.P. Yoshida and R.G.T. Zegers*
Third International Workshop on "Neutrino-Nucleus interactions in the Few-GeV
region"
Assergi, Italy, March 17 - 21 (2004)
Nucl. Phys. B-Proc. Suppl. **139** (2005) 72-76
Detection of nuclear de-excitation gamma-rays in water Cherenkov detector

14. *H. Makii, Y. Nagai, T. Shima, M. Segawa, H. Ueda, T. Masaki, K. Mishima, M. Igashira, T. Ohsaki, S. Okabe*
8th International Symposium on "Nuclei in the Cosmos (NIC8)"
Vancouver, British Columbia, Canada, July 19-23 (2004)
Nucl. Phys. **A758** (2005) 371C-374C
Measurement of the $^{12}\text{C}(\alpha, \gamma)^{16}\text{O}$ reaction cross section using pulsed α beams
15. *Y. Nagai, A. Tomyo, Y. Temma, M. Segawa, T. Shima, H. Makii, M. Igashira, T. Ohsaki*
8th International Symposium on "Nuclei in the Cosmos (NIC8)"
Vancouver, British Columbia, Canada, July 19-23 (2004)
Nucl. Phys. **A758** (2005) 537C-540C
Measurement of the keV neutron capture cross section of ^{62}Ni
16. *T. Nakano*
10th International Conference on the "Structure of Baryons"
École Polytechnique, Cedex, Palaiseau, France, October 25-29 (2004)
Nucl. Phys. **A755** (2005) 3C-6C
Experimental review of pentaquark
17. *T. Nakano*
10th International Symposium on "Meson-Nucleon Physics and the Structure of the Nucleon (MENU2004)"
Beijing, China, August 29 - September 4 (2004)
J. Modern Phys. **A20** (2005) 1543-1547
Recent results from LEPS
18. *M. Nomachi, P. Doe, H. Ejiri, S.R. Elliott, J. Engel, M. Finger, J.A. Formaggio, K. Fushimi, V. Gehman, A. Gorin, M. Greenfield, R. Hazama, K. Ichihara, Y. Ikegami, H. Ishii, T. Itahashi, P. Kavitov, V. Kekelidze, K. Kuroda, V. Kutsalo, I. Manouilov, K. Matsuoka, H. Nakamura, T. Ogama, A. Para, K. Rielage, A. Rjazantsev, R.G.H. Robertson, Y. Shichijo, T. Shima, Y. Shimada, G. Shirkov, A. Sissakian, Y. Sugaya, A. Titov, V. Vatulin, O.E. Vilches, V. Voronov, J.F. Wilkerson, D.I. Will and S. Yoshida*
8th International Workshop on "Topics in Astroparticle and Underground Physics (TAUP2003)",
Seattle, WA, USA, September 5-9 (2003)
Nucl. Phys. B - Proc. Suppl. **138** (2005) 211-223
MOON (Mo Observatory of Neutrinos) for double beta decay
19. *I. Ogawa*
Workshop on "Neutrino Nuclear Responses (NNR05),"
Sayo-gun, Hyogo, December, 2-4 (2005),
CANDLES and ^{48}Ca DBD matrix elements
20. *C. Ohmori, M. Aoki, Y. Kuriyama, M. Yoshida, Y. Arimoto, M.A. Sato, Y. Kuno, Y. Iwashita and S. Ninomiya*
6th International Workshop on "Neutrino Factories & Superbeams (NuFact04)"
Osaka University, Osaka, Japan, July 26 - August 1 (2004),
Nucl. Phys. B - Proc. Suppl. **149** (2005) 280-282
Ultra-high field gradient RF for bunch rotation

21. *H. Oota, S. Ajimura, K. Aoki, A. Banu, H.C. Bhang, T. Fukuda, O. Hashimoto, J.I. Hwang, S. Kameoka, B.H. Kang, E.H. Kim, J.H. Kim, M.J. Kim, T. Maruta, Y. Miura, Y. Miyake, T. Nagae, M. Nakamura, S.N. Nakamura, H. Noumi, S. Okada, Y. Okayasu, H. Park, P.K. Saha, Y. Sato, M. Sekimoto, T. Takahashi, H. Tamura, K. Tanida, A. Toyoda, K. Tsukada, T. Watanabe and H.J. Yim*
 The 8th International Conference on "Hypernuclear and Strange Particle Physics,"
 Newport News, VA, USA, October 14-18 (2003)
 Nucl. Phys. **A754** (2005) 157C-167C
 Hypernuclear Weak Decay Experiments at KEK: $n - n$ and $n - p$ Coincidence
 Measurement

22. *M. Sasano, H. Sakai, K. Yako, T. Saito, H. Kuboki, Y. Takahashi, T. Wakasa, S. Asaji, Y. Hagihara, K. Hatanaka, A. Tamii, Y. Sakemi, Y. Tameshige, Y. Shimizu, K. Fujita, Y. Fujita, H. Okamura, K. Sekiguchi, Y. Maeda, T. Kawabata, M.B. Greenfield*
 The International Symposium on "Correlation Dynamics in Nuclei (CDN2005)",
 Tokyo, Japan, January 31 - February 4 (2005)
 J. Phys.:Conference Series **20** (2005) 181-182
 Determination of Gamow-Teller unit cross sections of the (p,n) reaction at 200 and
 300 MeV

23. *M. Segawa, Y. Nagai, T. Shima, H. Makii, K. Mishima, H. Ueda, H. Temma, T. Masaki, M. Igashira, T. Ohsaki, T. Shizuma and T. Hayakawa*
 8th International Symposium on "Nuclei in the Cosmos(NIC8)"
 Vancouver, British Columbia, Canada, July 19-23 (2004)
 Nucl. Phys. **A758** (2005) 553C-556C
 Neutron experiment for the study of Re/Os cosmochronometer

24. *T. Shima, Y. Nagai, H. Makii, K. Mishima, M. Segawa, H. Ueda, Y. Tamma, T. Masaki, M. Igashira, T. Ohsaki, T. Hayakawa, T. Shizuma, H. Utsunomiya*
 8th International Symposium on "Nuclei in the Cosmos(NIC8)",
 Vancouver, British Columbia, Canada, July 19-23 (2004)
 Nucl. Phys. **A758** (2005) 557C-560C Suppl.
 Experimental study of cosmonuclear physics at J-PARC

25. *T. Shima, H. Makii, K. Mishima, Y. Nagai, M. Segawa, H. Ueda, T. Masaki, M. Igashira, T. Ohsaki, I. Sugai, Y. Takeda*
 The International Symposium on the "Origin of Matter and Evolution of Galaxies
 2003",
 Wako, Saitama, Japan, November 17-19 (2003)
 World Scientific (2005) 217-225
 Direct measurement of the E1 and E2 cross sections of the $^{12}\text{C}(\alpha, \gamma)^{16}\text{O}$ reaction at
 $E_{c.m.}=1.3\sim 1.5$ MeV

26. *Y. Shimizu, K. Hatanaka, G.P.A. Berg, M. Wiescher, H. Schatz, T. Adachi, A.D. Bacher, C.C. Foster, K. Fujita, H. Fujita, Y. Fujita, J. Görres, Ch.Herman, J. Kamiya, Y. Sakemi, Y. Shimbara, E.J. Stephenson, T. Wakasa and M. Yosoi*
The International Symposium on the "Origin of Matter and Evolution of Galaxies 2003",
Wako, Saitama, Japan, November 17-19 (2003)
World Scientific (2005) 367-374
Resonance states in ^{22}Mg , ^{26}Si for reaction rates in the RP-Process
27. *K. Takahisa, H. Akimune, H. Ejiri, H. Fujimura, M. Fujiwara, K. Hara, H. Hashimoto, K. Hatanaka, T. Itahasi, T. Kawabata, K. Kawase, Y. Koreeda, N. Maehara, S. Mordechai, Y. Nagai, K. Nakanishi, S. Ninomiya, T. Shima, M. Tanaka, S. Umehara, S. Umisedo, H.P. Yoshida, S. Yoshida, M. Yoshimura and M. Yosoi*
The International Symposium on the "Origin of Matter and Evolution of Galaxies 2003",
Wako, Saitama, Japan, November 17-19 (2003)
World Scientific (2005) 533-536
The nuclear responses for double beta neutrinos and double spin isospin resonances by using of double charge exchange heavy ion reaction
28. *R. Takasu, Y. Tosaka, H. Fukuda and Y. Kataoka*
Proc. 2005 Int. Reliability Physics Symp., pp. 230-233, 2005.
A Novel Method for Accurate Estimation of Alpha-Induced Soft Error Rate
29. *M. Tanaka, Y. Takahashi, T. Shimoda, T. Furukawa, S. Yasui, M. Yosoi, and K. Takahisa*
The 11th International workshop on "Polarized sources and targets"
Tokyo, Japan, November 14-17 (2005),
To be published in World Scientific in 2006
Polarized ^3He ion source based on the spin-exchange collisions
30. *Y. Tosaka, R. Takasu, H. Ehara, T. Uemura, H. Oka, S. Satoh, N. Matsuoka, and K. Hatanaka*
Proc. 2005 Int. Conf. on "Solid State Devices and Materials", pp. 442-443, 2005.
Technology Trend of Soft Errors based on Accurate Estimation Method
31. *S. Umehara*
The 9th Conference on "Topics in Astroparticle and Underground Physics",
Zaragoza, September, 10-14 (2005),
CANDLES for double beta decay of ^{48}Ca
32. *T. Uemura, Y. Tosaka, and S. Satoh*
Proc. 2005 Int. Conf. on "Solid State Devices and Materials", pp. 942-943, 2005.
Neutron-Induced Soft-Error Simulation Technology for Logic Circuits
33. *M. Utsuro, M. Hino, P. Geltenbort, J. Butterworth*
Journal of Research of the National Institute of Standards and Technology **110** (2005)
245-249
Observation on the visibility decrease in a VCN spin resonator interferometry

34. *M. Utsuro, M. Tanaka, K. Mishima, Y. Nagai, T. Shima, Y. Fukuda, T. Kohmoto, T. Momose, A. Moriai, K. Okumura and H. Yoshino*
Journal of Research of the National Institute of Standards and Technology **110** (2005) 273-277
UCN production with a single crystal of Ortho-Deuterium
35. *T. Yamagata, N. Warashina, M. Kinoshita, H. Akimune, S. Ashaji, M. Fujiwara, M.B. Greenfieldd, H. Hashimoto, R. Hayami, K. Ishida, K. Kawase, T. Kudoh, K. Nakanishi, S. Nakayama, S. Okumura, K. Sagara, M. Tanaka, H. Utsunomiya, and M. Yosoi*
International Symposium on "Exotic Nuclear Systems (ENS'05)",
Debrecen, Hungary, June 20-25 (2005)
AIP Conference Proceedings Vol. 802, pp. 301-304
Excitation of the Giant Dipole Resonances in ^4He and in the α Cluster of $^{6,7}\text{Li}$ via (p,p') Reactions
36. *S. Yoshida, T. Kishimoto, I. Ogawa, R. Hazama, S. Umehara, K. Matsuoka, D. Yokoyama, K. Mukaida, K. Ichihara and Y. Tatewaki*
The 8th International Workshop on "Topics in Astroparticle and Underground Physics (TAUP2003)",
Seattle, WA, USA, September 5-9 (2003)
Nucl. Phys. B -Proc. Suppl. **138** (2005) 214-216
CANDLES Project for Double Beta Decay of ^{48}Ca
37. *M. Yosoi for the LEPS collaboration*
6th International Conference on "Nuclear Physics at Storage Rings",
Bonn, Germany, May 23-26 (2005),
Schriften des Forschungszentrums Jülich, Matter and Material, Vol. 30, pp.179-185
GeV photon beam experiments at the SPring-8 laser-backscattering facility
38. *R.G.T. Zegers, A.L. Cole, H. Akimune, S.M. Austin, D. Bazin, A.M. van den Berg, G.P.A. Berg, J. Brown, I. Daito, Y. Fujita, M. Fujiwara, K. Hara, M.N. Harakeh, G.W. Hitt, M.E. Howard, J. Jänecke, T. Kawabata, T. Namamura, H. Ueno, H. Schatz, B.M. Sherrill, M. Steiner*
8th International Symposium on "Nuclei in the Cosmos (NIC8)",
Vancouver, British Columbia, Canada, July 19-23 (2004), Nucl. Phys. **A758** (2005) 67C-70C
Weak interaction strengths for supernovae calculations via the $(t, ^3\text{He})$ reaction on medium-heavy nuclei

Theoretical Researches

1. *A. Haga, Y. Horikawa, H. Toki, Y. Tanaka*
12th International Conference on the "Physics of Highly Charged Ions (HCI2004)",
Vilnius, Lithuania, September 6-11, (2004)
Nucl. Instrum. Meth. **B235** (2005) 71-75
Full-relativistic calculation of nuclear polarization in atomic and muonic levels

2. *H. Haga, Y. Horikawa, Y. Tanaka, H. Toki*
 The Third International Workshop on "Neutrino-Nucleus Interactions in the Few-GeV Region (NuInt04)",
 Assergi, Italy, March 17-21 (2004)
 Nucl. Phys. B -Proc. Suppl. **139** (2005) 234-237
 Relativistic and nonrelativistic descriptions of nuclear polarization in electronic and muonic atoms

3. *A. Hosaka*
 10th International Conference on the "Structure of Baryons (Baryons04)",
 Palaiseau, France, October 25-29 (2004)
 Nucl. Phys. **A755** (2005) 407C-410C
 Decay of the Θ^+ in a quark model

4. *A. Hosaka*
 Workshop on Hadron Physics
 Puri, India, Mar. 7-17 (2005)
 PRAMANA, Journal of Physics **66** (2006) 625
 Structure and reactions of pentaquark baryons

5. *E. Hiyama, M. Kamimura, A. Hosaka, H. Toki, M. Yahiro*
 10th International Conference on the "Structure of Baryons (Baryons04)",
 Palaiseau, France, October 25-29, (2004)
 Nucl. Phys. **A755** (2005) 411C-414C
 Five-body calculation of resonance and continuum states of pentaquark baryons with quark-quark correlations

6. *T. Hyodo, and A. Hosaka*
 Joint JPS and APS Hawaii Meeting
 Ritz-Carlton, Hawaii, September 18-22, (2005),
 Phenomenology of spin 3/2 baryons with pentaquarks

7. *T. Hyodo, and A. Hosaka*
 Pentaquark 2005
 Jefferson Lab., Newport News, October 20-22, (2005),
 Phenomenology of spin 3/2 baryons with pentaquarks

8. *T. Hyodo, and A. Hosaka*
 Workshop on "Hadron Structure at J-PARC",
 KEK, Tsukuba, November 30 - December 2, (2005)
 K^* vector meson coupling to the $\Lambda(1520)$ resonance

9. *T. Hyodo, A. Hosaka, F.J. Llanes-Estrada, E. Oset, J. R. Peláez, and M. J. Vicente Vacas*
 10th International Conference on "Baryons (Baryons04)",
 Palaiseau, France, October 25-29, (2004), Nucl. Phys. A 755, 395-398 (2005)
 Two-meson cloud contribution to the baryon antidecuplet self-energy.

10. *T. Hyodo, A. Hosaka, F.J. Llanes-Estrada, E. Oset, J. R. Peláez, and M. J. Vicente Vacas*
 Workshop on "Quark Nuclear Physics 2005",
 Phoenix Park, Korea, February 22-24, (2005),
 Two-meson cloud contribution to the baryon antidecuplet binding
11. *N. Ikezi, M. Asakawa, and Y. Tsue*
 Workshop on "Workshop on Particle Correlations and Femtoscopy"
 Kromeriz, Czech Republic, August 15-17 (2005)
 AIP Proceedings (Volume is to be assigned)
 Non-equilibrium chiral dynamics and two particle correlation in time-dependent variational approach with squeezed states
12. *N. Ikezi, M. Asakawa, and Y. Tsue*
 Workshop on "Nonequilibrium dynamics in QCD phase transitions"
 YITP, Kyoto University, Japan, February 22 - 24 (2005)
 Soryushiron Kenkyu **112** No.1 (2005) A1,
 Non-equilibrium chiral dynamics by using the time-dependent variational approach with squeezed states
13. *N. Ikezi, M. Asakawa, and Y. Tsue*
 Osaka University-Asia Pacific-Vietnam National University, "Hanoi Forum 2005",
 Hanoi, Vietnam September 27 - 29 (2005), Osaka University Press,
 Non-equilibrium chiral dynamics by using the time-dependent variational approach with squeezed states
14. *Y. Kwon, A. Hosaka and S. H. Lee*
 Workshop on Quark Nuclear Physics
 Nuclear and Hadronic Systems and Quark Degrees of Freedom
 Pyoungchang, Kangwondo, Korea, Feb. 22-24, 2005
 Non-interacting KN contribution in the QCD sum rule for the pentaquark $\Theta^+(1540)$
15. *Y. Manabe, A. Hosaka, H. Toki*
 second Joint Meeting of the Nuclear Physics Divisions
 of the American Physical Society and The Physical Society of Japan
 Ritz-Carlton, Kapalua Maui, Hawaii
 Relation between the separable and one-boson-exchange potential for the covariant Bethe-Salpeter equation
16. *T. Myo, K. Kato, H. Toki and K. Ikeda*
 An international conference on the "Interface Between Nuclear Structure,
 Astrophysics and Reactions (NUSTAR'05)",
 Univ of Surrey, Guildford, UK, Jan. 5-8 2005.
 Journal of Physics G: Nucl. Part. Phys. 31 (2005) S1681-S1685
 Tensor correlation in He isotopes
17. *T. Myo, K. Kato, H. Toki and K. Ikeda*
 International Symposium on "Correlation Dynamics in Nuclei (CDN05)",
 The Univ of Tokyo, Japan, Jan. 31- Feb. 4, 2005.
 Journal of Physics, Conference Series 20 187-188(2005)
 Tensor correlation in neutron halo nuclei

18. *T. Myo, K. Kato, H. Toki and K. Ikeda*
International Symposium on "Exotic Nuclear Systems (ENS05)",
ATOMKI, Debrecen, Hungary, Jun. 20-24, 2005
AIP Conference Proceeding 802 (2005) 202
Tensor correlation in neutron halo nuclei
19. *H. Nagahiro, S. Hirenzaki, D. Jido*
10th International Conference on "Structure of Baryons (Baryons 2004)",
Palaiseau, France, 25-29 Oct 2004.
Nucl. Phys. **A755** (2005) 491-494.
In-medium properties of $N^*(1535)$ in chiral models and η -nucleus interaction
20. *H. Nagahiro, S. Hirenzaki, E. Oset, M.J. Vicente Vacas*
International Workshop on "PENTAQUARK04,"
Spring-8, Hyogo, Japan, 20-23 Jul 2004.
Nishiharima 2004, Pentaquark* pp.378-385 (2005).
Production of Θ^+ Hypernuclei with the (K^+, π^+) reaction
21. *K. Nagata and A. Hosaka*
The international workshop on "Quark Nuclear Physics 2005",
Pyoungchang, Korea, Feb. 22-24, (2005)
Pusan National University Press (2005) pp.131-143
Path-integral approach of a chiral quark-diquark model to the nucleon structure and interactions
22. *K. Nagata and A. Hosaka*
The name of the conference/symposium "PANIC '05",
Santa Fe, US, Oct. 24-28, 2005
The nucleon and roper resonance in a chiral quark-diquark model
23. *K. Nagata and A. Hosaka*
Workshop on "Hadron Structure at J-PARC",
KEK, Japan, Nov. 30- Dec. , 2005
Quark-Diquark Approach for the Nucleon and Roper Resonance
24. *T. Nagasawa, A. Haga, M. Nakano and Y. Horikawa*
12th International Conference on the "Physics of Highly Charged Ions (HCI2004)",
Vilnius, Lithuania, September 6-11 (2004)
Nucl. Instrum. Meth. **B235** (2005) 61-64
Hyperfine splitting of hydrogen-like ions and relativistic nuclear model
25. *S.I. Nam, A. Hosaka, H.C. Kim*
Few-body Physics Workshop
Osaka, Japan, Dec. 23-25, 2004
Genshikaku Kenkyu **49** (2005) 53
Photoproduction of $\Lambda(1520, 3/2^-)$
26. *S.I. Nam, A. Hosaka, H.C. Kim*
10th International Conference on the "Structure of Baryons",
École Polytechnique, Cedex, Palaiseau, France, October 25-29 (2004)
Nucl. Phys. **A755** (2005) 423C-426C
Determination of the parity of the pentaquark baryons: Θ^+ and Ξ_5

27. *S.I. Nam, A. Hosaka, H.C. Kim*
 Workshop on Quark Nuclear Physics
 Nuclear and Hadronic Systems and Quark Degrees of Freedom
 Pyoungchang, Kangwondo, Korea, Feb. 22-24, 2005
 "Production of $\Lambda(1520)$ "
28. *A. Ramos, C. Bennhold, A. Hosaka, T. Hyodo, D. Jido, U.G. Meissner, J.A. Oller, E. Oset, and M.J. Vicente-Vacas*
 Workshop on the "Physics of Excited Nucleons (NSTAR2004)",
 Grenoble, France, March 24-27 (2004), nucl-th/0502053
 Dynamical baryon resonances from chiral unitar
29. *G. Smirnov, V.V. Burov, A.V. Molochkov and H. Toki*
 10th International Conference on the "Structure of Baryons",
 École Polytechnique, Cedex, Palaiseau, France, October 25-29 (2004)
 Nucl. Phys. **A755** (2005) 337C-340C
 Relating $F_2^p(x)$ and $F_2^D(x)$ using a relativistic description of the deuteron structure
30. *J. Sugiyama, T. Doi and M. Oka*
 Int. Workshop on "Pentaquark04"
 SPring-8, Japan, July 20-23 (2004)
 World Scientific (2005) 316-323
 Pentaquark Baryon from the QCD Sum Rule with the Ideal Mixing
31. *J. Sugiyama, T. Doi and M. Oka*
 Second Joint Meeting of the Nuclear Physics Divisions of the APS and JPS (HAW05)
 Maui, USA, September 18-22 (2005)
 QCD Sum Rule for Spin-3/2 Pentaquarks
32. *K. Sumiyoshi, S. Yamada, H. Suzuki, H. Shen and H. Toki*
 8th International Symposium on "Nuclei in the Cosmos (NIC8)",
 Vancouver, British Columbia, Canada, July 19-23 (2004)
 Nucl. Phys. **A758** (2005) 63C-66C
 An approach toward the successful supernova explosion by physics of unstable nuclei
33. *R. Suzuki, T. Myo, K. Kato*
 International Symposium on "Exotic Nuclear Systems (ENS05)",
 ATOMKI, Debrecen, Hungary, Jun. 20-24, 2005
 AIP Conference Proceeding 802 (2005) 129
 Continuum level density in complex scaling method
34. *H. Toki, E. Hiyama, M. Kamimura and A. Hosaka*
 6th Conference on Quark Confinement and the Hadron Spectrum
 Villasimius, Sardinia, Italy, Sep. 21-25, 2004
 AIP Conf. Proc. **756** (2005) 312-314
 Chiral symmetry, scalar di-quark and pentaquark

Physics with supercomputer

1. *V.G. Bornyakov, M.N. Chernodub, Y. Mori, S.M. Morozov, Y. Nakamura, M.I. Polikarpov, G. Schierholz, A.A. Slavnov, H. Stueben, T. Suzuki*
XXIII International Symposium on Lattice Field Theory
Dublin, Ireland, Proc. of Science (LAT2005) (2005) 157
Critical temperature in QCD with two flavors of dynamical quarks
2. *M. N. Chernodub, K. Ishiguro and T. Suzuki*
Quark confinement and the hadron spectrum VI 2004
Sardinia, Italy, (2004), AIP Conf. Proc. **756** (2005) 266
Gas of monopoles in three dimensional SU(2) gluodynamics
3. *T. Doi, N. Ishii, M. Oka and H. Suganuma*
Nucl. Phys. B. (Proc. Suppl.) **140** (2005) 559-561
The lattice QCD simulation of the quark-gluon mixed condensate at finite temperature and the phase transition of QCD
4. *T. Doi, T.T. Takahashi and H. Suganuma*
Particles and Nuclei International Conference (PANIC'05)
Santa Fe, New Mexico, Oct. 24-28 (2005)
AIP Conf. Proc. (2006), hep-lat/0601008
Meson-Meson and Meson-Baryon Interactions in Lattice QCD
5. *T. Doi, N. Ishii, Y. Nemoto, M. Oka and H. Suganuma*
XXIIIrd Int. Symp. on "Lattice Field Theory" (Lattice 2005)
Trinity College, Dublin, Ireland, July 25-30 (2005)
Proc. of Science (LAT2005) 064 (6 pages)
Anisotropic Lattice QCD Study of Pentaquark Baryons in Spin 3/2 Channel
6. *T. Doi, T. Blum, M. Hayakawa, T. Izubuchi and N. Yamada*
Second Joint Meeting of the Nuclear Physics Divisions of the APS and JPS (HAW05)
Maui, USA, September 18-22 (2005)
Isospin Breaking of Baryon Masses from Domain-Wall Lattice QCD
7. *H. Fukaya, S. Hashimoto and K. Ogawa*
23rd International Symposium on Lattice Field Theory: Lattice 2005
Trinity College, Dublin, Ireland, 25-30 Jul 2005
Proc. of Science (LAT2005) (2005) 133
Meson correlators in a finite volume near the chiral limit
8. *H. Fukaya, S. Hashimoto, T. Hirohashi, H. Matsufuru, K. Ogawa and T. Onogi*
23rd International Symposium on Lattice Field Theory: Lattice 2005
Trinity College, Dublin, Ireland, 25-30 Jul 2005, Proc. of Science (LAT2005) (2005)
123
Overlap fermion with the topology conserving gauge action
9. *H. Fukaya, T. Onogi, S. Hashimoto, T. Hirohashi and K. Ogawa*
23rd International Symposium on Lattice Field Theory: Lattice 2005
Proc. of Science (LAT2005) (2005) 317
Parameter dependence of the topology change and the scaling properties of the topology conserving gauge action

10. *H. Iida, N. Ishii, T. Doi and H. Suganuma*
 XXIIIrd Int. Symp. on "Lattice Field Theory" (Lattice 2005)
 Trinity College, Dublin, Ireland, July 25-30 (2005)
 Proc. of Science (LAT2005) 184 (6 pages)
J/Ψ at High Temperatures in Anisotropic Lattice QCD
11. *H. Iida, M. Oka and H. Suganuma*
 Nuclear Physics Proc. Suppl. **B141** (2005) 191-195
 Lattice-QCD based Schwinger-Dyson Approach for Chiral Phase Transition
12. *K. Ishiguro, Y. Mori, Y. Nakamura, T. Sekido, T. Suzuki, M. N. Chernodub,
 M. I. Polikarpov and V. I. Zakharov*
 XXIII International Symposium on Lattice Field Theory
 Dublin, Ireland, (2005), Proc. of Science (LAT2005) (2005) 307
 Towards SU(2) invariant formulation of the monopole confinement mechanism
13. *N. Ishii, T. Doi, H. Iida, M. Oka, F. Okiharu and H. Suganuma*
 Nuclear Physics Proc. Suppl. B **140** (2005) 269-271
 Penta-Quark Anti-Decuplet in Anisotropic Lattice QCD
14. *N. Ishii, T. Doi, H. Iida, M. Oka, F. Okiharu and H. Suganuma*
 Nucl. Phys. **A755** (2005) 467c-470c
 Penta-quark in Anisotropic Lattice QCD
15. *N. Ishii, T. Doi, H. Iida, M. Oka, F. Okiharu, H. Suganuma and K. Tsumura*
 Particles and Nuclei International Conference (PANIC'05)
 Santa Fe, New Mexico, Oct. 24-28 (2005)
 AIP Conf. Proc. (2006), hep-lat/0601003
 Anisotropic Lattice QCD Studies of Penta-Quarks and Tetra-Quarks
16. *N. Ishii, T. Doi, H. Iida, M. Oka, F. Okiharu and H. Suganuma*
 Int. Workshop on "Pentaquark04"
 SPring-8, Japan, July 20-23 (2004)
 World Scientific (2005) 316-323
 Anisotropic Lattice QCD Studies of Penta-Quark Anti-Decuplet
17. *N. Ishii, T. Doi, Y. Nemoto, M. Oka and H. Suganuma*
 Second Joint Meeting of the Nuclear Physics Divisions of the APS and JPS (HAW05)
 Maui, USA, September 18-22 (2005)
 Anisotropic Lattice QCD Studies of Spin 3/2 Penta-Quark
18. *Y. Koma and M. Koma*
 the 22nd International Symposium on "Lattice Field Theory (Lattice 2004)",
 Fermilab, USA, 21-26 Jun 2004
 Nucl. Phys. B (Proc. Suppl.) **140** 329 (2005) [hep-lat/0409002]
 Finite size mass shift formula for stable particles revisited
19. *M. Koma Y. Koma and H. Wittig*
 23rd International Symposium on "Lattice Field Theory (LATTICE 2005)",
 Trinity College, Dublin, Ireland, 25-30 July 2005.
 Proc. Sci. LAT2005 216 (2005) [hep-lat/0510059]
 Determination of spin-dependent potentials with the multi-level algorithm

20. *K.-I. Kondo*
 Invited talk in Understanding Confinement
 Ringberg Castle, Muchen, Germany, May 16-21, 2005
 organized by W. Ochs, L. Stodolsky, A. Vainshtein and V. Zakharov
 Stability of Yang-Mills vacuum and confinement due to a novel vacuum condensate
21. *T. Kunihiro, S. Muroya, A. Nakamura, C. Nonaka, M. Sekiguchi, H. Wada*
 XXIII International Symposium on "Lattice Field Theory",
 Dublin, Ireland, July 25-30 (2005)
 Proceeding of Science PoS(LAT2005) (2005) 034
 I=1/2 Scalar and Axial Vector Mesons
22. *H. Matsufuru, H. Fukaya, M. Okawa, T. Onogi, T. Umeda*
 22nd International Symposium on Lattice Field Theory (Lattice 2004)
 Nucl. Phys. Proc. Suppl. **140** (2005) 734-736
 ANISOTROPIC LATTICE WITH NONPERTURBATIVE ACCURACY
23. *M. Matsuo, K. Mizuyama, and Y. Serizawa*
 "ENUM '04", The Southern Pine Conference Center Callaway Gardens, Pine
 Mountain, GA, Sep. 12-16, (2004)
 Eur. Phys. J. A 25 Supplement1 (2005) 563-565.
 Di-neutron correlations in medium-mass neutron-rich nuclei near the drip-line
24. *Y. Nakamura, V.G. Bornyakov, M.N. Chernodub, Y. Mori, S.M. Morozov,
 M.I. Polikarpov, G. Schierholz, A.A. Slavnov, H. Stüben, T. Suzuki*
 Quark confinement and the hadron spectrum VI 2004
 Sardinia, Italy, (2004)
 AIP Conf.Proc. **756** (2005) 242
 Finite temperature QCD with two flavors of dynamical quarks on $24^3 \times 10$ lattice
25. *Y. Nakamura, V.G. Bornyakov, M.N. Chernodub, Y. Mori, S.M. Morozov,
 M.I. Polikarpov, G. Schierholz, A.A. Slavnov, H. Stüben, T. Suzuki*
 XXII International Symposium on Lattice Field Theory
 Fermi National Accelerator Laboratory, USA, (2004)
 Nucl. Phys. Proc. Suppl. **140** (2005) 535-537
 Finite temperature QCD with two flavors of dynamical quarks on $24^3 \times 10$ lattice
26. *A. Nakamura, Y. Sasai, T. Takaishi*
 6th Conference on Quark Confinement and the Hadron Spectrum
 Villasimius, Sardinia, Italy, 21-25 Sep 2004, AIP Conf.Proc. **756** (2005) 416
 FINITE DENSITY LATTICE QCD: HOW TO FIGHT AGAINST THE COMPLEX
 FERMION DETERMINANT
27. *A. Nakamura, T. Saito*
 AIP Conf.Proc. **756** (2005) 239-241
 LATTICE STUDY OF GLUE-DYNAMICS: GAUGE DEPENDENT OBJECTS
28. *Y. Namekawa, Y. Kikukawa*
 The 23rd International Symposium on Lattice Field Field: Lattice 2005
 Proc. of Science (LAT2005) (2005) 090
 Electromagnetic mass difference on the lattice

29. *S. Negishi, H. Matsufuru, T. Onogi and T. Umeda*
23rd International Symposium on "Lattice Field: Lattice 2005"
Trinity College, Dublin, Ireland, 25-30 Jul 2005, PoS **LAT2005**, 208 (2005)
Study of $1/m$ corrections in HQET
30. *H. Nemura*
19th European Few-Body Conference AIP Conf. Proc. **768** (2005) 284
Exotic structures of light hypernuclei
31. *F. Okiharu, H. Suganuma and T.T. Takahashi*
Int. Workshop on "Pentaquark04" (2004) 339-343
The Static Penta-Quark Potential in Lattice QCD
32. *F. Okiharu, H. Suganuma, T.T. Takahashi and T. Doi*
Particles and Nuclei International Conference (PANIC'05)
Santa Fe, New Mexico, Oct. 24-28 (2005)
AIP Conf. Proc. (2006), hep-lat/0601005
Multi-Quarks and Two-Baryon Interaction in Lattice QCD
33. *F. Okiharu, T. Doi, H. Ichie, H. Iida, N. Ishii, M. Oka, H. Suganuma and T.T. Takahashi*
Int. Workshop on "Quark Nuclear Physics"
Phoenix Park, Korea, Feb. 22-24 (2005), (2005) 22 pages
Tetraquark and Pentaquark Systems in Lattice QCD
34. *I. Pushkina*
23rd International Symposium on Lattice Field Field
Trinity College, Dublin, Ireland, 25-30 Jul 2005
Proc. of Science (LAT2005) (2005) 169
Lattice QCD with chemical potential: the properties of hadrons at the extreme conditions
35. *T. Saito, H. Toki, Y. Nakagawa, A. Nakamura*
Proc. of Science (LAT2005) (2005) 303
Lattice study of color confinement mechanism in Coulomb gauge
36. *T. Sekido, K. Ishiguro, Y. Nakamura and T. Suzuki*
XXIII International Symposium on Lattice Field Theory
Dublin, Ireland, (2005), Proc. of Science (LAT2005) (2005) 329
Gauge invariance of Abelian dual Meissner effect in pure SU(2)QCD
37. *Y. Serizawa and M. Matsuo*
"New Developments in Nuclear Self-Consistent Mean-Field Theories (MF05)",
Yukawa Institute for Theoretical Physics, Kyoto, Japan, May 30 - Jun.01 (2005)
Soryushiron Kenkyu (Kyoto) **112** (2005) B93.
Di-neutron correlations in medium-mass neutron-rich nuclei near the drip-line

38. *A. Shibata, K-I. Kondo, S. Kato, T. Murakami, T. Shinohara*
Symposium on Lattice Field Field: Lattice 2005
Trinity College, Dublin, Ireland, 25-30 Jul 2005
PoS LAT2005 : 332, 2005
Cho-Faddeev-Niemi decomposition of lattice Yang-Mills theory and evidence of a novel magnetic condensation
39. *H. Suganuma, H. Ichie, F. Okiharu and T.T. Takahashi*
Int. Workshop on "Pentaquark04" (2004) 414-421
Narrow Width of Penta-Quark Baryons in QCD String
40. *H. Suganuma, H. Ichie, F. Okiharu and T.T. Takahashi*
Int. Conf. on "High Energy and Mathematical Physics"
Moroccan Publisher (2005) 13
Lattice QCD Study for Confinement and Hadrons
41. *H. Suganuma, F. Okiharu, T.T. Takahashi and H. Ichie*
Nuclear Physics **A755** (2005) 399c-402c
Role of Large Gluonic Excitation Energy for Narrow Width of Penta-Quark Baryons in QCD String Theory
42. *H. Suganuma, T.T. Takahashi, F. Okiharu and H. Ichie*
Nuclear Physics Proc. Suppl. **B141** (2005) 92-98
Study of Quark Confinement in Baryons with Lattice QCD
43. *H. Suganuma, T.T. Takahashi, F. Okiharu and H. Ichie*
AIP Conf.Proc. **756** (2005) 123-132
Lattice QCD Study for the Interquark Force in Three-Quark and Multi-Quark Systems
44. *H. Suganuma, K. Tsumura, N. Ishii and F. Okiharu*
XXIIIrd Int. Symp. on "Lattice Field Theory" (Lattice 2005)
Proc. of Science (LAT2005) (2005) 070
Lattice QCD Evidence for Exotic Tetraquark Resonance
45. *J. Sugiyama, T. Doi and M. Oka*
Int. Workshop on "Pentaquark04"
SPRING-8, Japan, July 20-23 (2004), World Scientific (2005) 354-357
Pentaquark Baryon from the QCD Sum Rule with the Ideal
46. *T. Suzuki, K. Ishiguro, Y. Mori and T. Sekido*
Quark confinement and the hadron spectrum VI 2004
Sardinia, Italy, (2004), AIP Conf. Proc. **756** (2005) 172
The dual Meissner effect in SU(2) Landau gauge
47. *T. Suzuki, K. Ishiguro, Y. Nakamura and T. Sekido*
XXIII International Symposium on Lattice Field Theory
Dublin, Ireland, (2005), Proc. of Science (LAT2005) (2005) 296
Gauge invariant 'monopoles' and color confinement mechanism

48. *T.T. Takahashi, T. Doi and H. Suganuma*
Particles and Nuclei International Conference (PANIC'05)
Santa Fe, New Mexico, Oct. 24-28 (2005)
AIP Conf. Proc. (2006), hep-lat/0601006
Nuclear force in Lattice QCD
49. *E. Uzu, Y. Koike, H. Kamada, and M. Yamaguchi*
The Third Asia-Pacific Conference on "Few-Body Problems in Physics",
Nakhon Ratchasima, Thailand. July 26-30, (2005)
World Scientific Publishing Co. Inc.
Study of Four-Nucleon Systems by Four-Body Faddeev-Yakubovsky Equations
50. *E. Uzu, H. Kamada, and Y. Koike*
The 19th European Conference on "Few-Body Problems in Physics",
Groningen, The Netherlands. August 23-27, (2004)
AIP Conference Proceedings Vol. 768 (2005), pp.446
Four-Body Calculation Above Four-Body Break-up Threshold

7.3 ACADEMIC THESIS

DOCTORS

1. *Lisheng Geng*
RCNP, Osaka University
Ground State Properties of Finite Nuclei in the Relativistic Mean Field Model
2. *Seung-Il Nam*
RCNP, Osaka University
Effective Lagrangian Approach for the Production of Pentaquark Baryons
3. *Yoshihiro Shimbara*
Department of Physics, Graduate School of Science, Osaka University
High Resolution Study of Gamow-Teller Transitions by $^{37}\text{Cl}(^3\text{He},t)^{37}\text{Ar}$ Reaction

MASTERS

1. *Takashi Emori*
Department of Physics, Kyoto University
Performance test of the Time Projection Chamber used for the Θ^+ search involving K^* photoproduction
2. *Maki Kinoshita*
Konan University
Excitation of the α cluster in ^6Li and ^7Li
3. *Tetsuya Kobayashi*
Physics Department, Osaka University
Measurement of Environmental Neutron Spectra with ^{10}B -Doped Liquid Scintillator
4. *Yoshiko Sasamoto*
Center for Nuclear Study, Graduate School of Science, University of Tokyo
Study of cluster states in ^{11}B and ^{13}C via (α, α') reaction
5. *Katsutoshi Terai*
Physics Department, Osaka University
Study on the $p(\gamma, K^0)\Sigma^+$ Reaction by Using Laser Backward Compton-Scattering Photon Beams

7.4 OTHERS

Editing Proceedings, books etc.

1. *J.K. Ahn, H. Bhang, S.W. Hong, A. Hosaka, H.-Ch. Kim and I.-K. Yoo*
International Workshop, Quark nuclear physics
Phenix Park, Pyongchang, Kangwondo, Korea, February 22-24, 2005
Pusan National University Press (2005)
Quark nuclear physics
2. *A. Hosaka and T. Hotta*
International Workshop, Pentaquark'04
SPring-8, Nishiharima, Hyogo, Japan, July 20-23, 2004
World Scientific (2005)
Pentaquark04

Articles

1. *M. Fujiwara*
The Review of Laser Engineering **34** (2006) 154-161
Nuclear Photon Science with Laser Inverse Compton Photon Beams (in Japanese)
2. *Y. Tosaka*
Nikkei Electronics, July 4, 2005, pp145-156
Software errors (in Japanese)
3. *E. Uzu, Y. Koike, H. Kamada and M. Yamaguchi*
Recent Progresses and Future Prospects on Few-Body Problems in Physics
—For the third Asia-Pacific conference on few-body problem in physics (APFB05)—
Genshikaku Kenkyu Vol.49 No. 6 (2005) pp.233
The three-body forces with two- Δ excitation and the N-d scattering