

RNC 中務原子核理論研究室

誌 上 発 表 Publications

[雑誌]

(原著論文) * 印は査読制度がある論文誌

Yabana K., Nakatsukasa T., and Ito M.: "Time-dependent description for nuclear reaction dynamics in the continuum", *Few Body Syst.* **43**, 247–253 (2008). *

Yoshida K.: "Monopole Modes of Excitation in Deformed Neutron-rich Mg Isotopes", *AIP Conf. Proc.* **1165**, 162–164 (2009).

Nakatsukasa T., Inakura T., and Yabana K.: "Finite amplitude method and systematic studies of photoresponse in deformed nuclei", *AIP Conf. Proc.* **1165**, 173–176 (2009). *

Yoshida K.: "Skyrme-QRPA calculations for low-lying excitation modes in deformed neutron-rich nuclei", *Eur. Phys. J. A* **42**, No. 3, pp. 583–590 (2009). *

Inakura T., Nakatsukasa T., and Yabana K.: "Systematic study of electric dipole excitations with fully self-consistent Skyrme HF plus RPA from light to medium-mass deformed nuclei", *Eur. Phys. J. A* **42**, 591–594 (2009). *

Middleton D., Annard J. R., Barbieri C., Giusti C., Grabmayr P., Hehl T., MacGregor I. J., Martin I., MacGeorge J. C., Moschini F., Pacati F. D., Schwamb M., and Watts D.: "Knockout of proton-neutron pairs from ^{16}O with electromagnetic probes", *Eur. Phys. J. A* **43**, 137–143 (2009). *

Nakatsukasa T., Inakura T., and Yabana K.: "TDDFT approach to photoabsorption in even-even nuclei", *Int. J. Mod. Phys. A* **24**, 2159–2167 (2009). *

Inakura T., Nakatsukasa T., and Yabana K.: "Response functions in the continuum of deformed nuclei studied with the time-dependent density-functional calculations", *Int. J. Mod. Phys. E* **18**, No. 10, pp. 2088–2092 (2009). *

Kawashita Y., Yabana K., Noda M., Nobusada K., and Nakatsukasa T.: "Oscillator strength distribution of C_{60} in the time-dependent density functional theory", *J. Mol. Struct.: Theochem* **914**, 130–135 (2009). *

De Rydt M., Neyens G., Asahi K., Balabanski D. L., Daugas J., Depuydt M., Gaudefroy L., Grevy S., Hasama Y., Ichikawa Y., Morel P., Nagatomo T., Ohtsuka T., Perrot L., Shimada K., Stoedel C., Thomas J., Ueno H., Utsuno Y., Wannes V., Vermeulen N., Vingerhoets P., and Yoshimi A.: "Precision measurement of the electric quadrupole moment of ^{31}Al and determination of the effective proton charge in the sd-shell", *Phys. Lett. B* **678**, 344–349 (2009). *

Long W., Nakatsukasa T., Sagawa H., Meng J., Nakada H., and Zhang Y.: "Non-local mean field effect on nuclei near $Z = 64$ sub-shell", *Phys. Lett. B* **680**, 428–431 (2009). *

Watanabe G., Dalfovo F., Piazza F., Pitaevskii L. P.,

and Stringari S.: "Critical velocity of superfluid flow through single-barrier and periodic potentials", *Phys. Rev. A* **80**, No. 5, pp. 053602-1–053602-9 (2009). *

Yoshida K.: "Core polarization for the electric quadrupole moment of neutron rich aluminum isotopes", *Phys. Rev. C* **79**, No. 5, pp. 054303-1–054303-6 (2009). *

Enyo Y., Hinohara N., Suhara T., and Schuck P.: "Dineutron correlations in quasi-two-dimensional systems in a simplified model, and possible relation to neutron-rich nuclei", *Phys. Rev. C* **79**, No. 5, pp. 054305-1–054305-14 (2009). *

Takeuchi S., Aoi N., Motobayashi T., Ota S., Takeshita E., Suzuki H., Baba H., Fukui T., Hashimoto Y., Ieki K., Imai N., Iwasaki H., Kanno S., Kondo Y., Kubo T., Kurita K., Minemura T., Nakamura T., Okumura T., Onishi T., Sakurai H., Shimoura S., Sugou R., Suzuki D., Suzuki M., Takashina M., Tamaki M., Tanaka K., Togano Y., and Yamada K.: "Low-Lying States in ^{32}Mg studied by proton inelastic scattering", *Phys. Rev. C* **79**, No. 5, pp. 054319-1–054319-11 (2009). *

Barbieri C. and Hiorth-Jensen M.: "Quasiparticle and quasi-hole states of nuclei around ^{56}Ni ", *Phys. Rev. C* **79**, 064313-1–064313-12 (2009). *

Hinohara N., Nakatsukasa T., Matsuo M., and Matuyanagi K.: "Microscopic description of oblate-prolate shape mixing in proton-rich Se isotopes", *Phys. Rev. C* **80**, No. 1, pp. 014305-1–014305-11 (2009). *

Taniguchi Y., Enyo Y., and Kimura M.: "Cluster structures and superdeformation in ^{28}Si ", *Phys. Rev. C* **80**, No. 4, pp. 044316-1–044316-9 (2009). *

Yoshida K.: "Pygmy dipole mode in deformed neutron-rich Mg isotopes close to the drip line", *Phys. Rev. C* **80**, No. 4, pp. 044324-1–044324-8 (2009). *

Inakura T., Nakatsukasa T., and Yabana K.: "Self-consistent calculation of nuclear photoabsorption cross sections: Finite amplitude method with Skyrme functionals in the three-dimensional real space", *Phys. Rev. C* **80**, 044301-1–044301-11 (2009). *

Yamagami M., Shimizu Y., and Nakatsukasa T.: "Optimal pair density functional for description of nuclei with large neutron excess", *Phys. Rev. C* **80**, 064301-1–064301-10 (2009). *

Want X., Janssens R., Carpenter M. P., Zhu S., Wiedenhover I., Garg U., Frauendorf S., Nakatsukasa T., Ahmad I., Bernstein A., Diffenderfer E., Freeman S. J., Greene J. P., Khoo T., Kondev F. G., Larabee A., Lauritsen T., Lister C. J., Meredith B., Seweryniak D., Teal C., and Wilson P.: "Structure of ^{240}Pu : Evidence for octupole phonon condensation?", *Phys. Rev. Lett.* **102**, 122501-1–122501-4 (2009). *

Watanabe G., Sonoda H., Maruyama T., Katsuhiko S., Yasuoka K., and Ebisuzaki T.: "Formation of nuclear "pasta" in supernovae", *Phys. Rev. Lett.* **103**, No. 12, pp. 121101-1–121101-4 (2009). *

- Barbieri C.: "Role of Long-Range Correlations in the Quenching of Spectroscopic Factors", Phys. Rev. Lett. **103**, 202502-1–202502-4 (2009). *
- Watanabe G.: "Efficient creation of maximally entangled states by modulation of tunneling rates", Phys. Rev. A **81**, No. 2, pp. 021604-1–021604-4 (2010). *
- Sato K., Hinohara N., Nakatsukasa T., Matsuo M., and Matuyanagi K.: "A Model Analysis of Triaxial Deformation Dynamics in Oblate-Prolate Shape Coexistence Phenomena", Prog. Theor. Phys. **123**, No. 1, pp. 129–155 (2010). *
- (総説)
- Yoshida K.: "Low-lying excitation modes in deformed neutron-rich nuclei", Int. J. Mod. Phys. E **17**, No. Supplement 1, pp. 272–285 (2008).
- 中務孝: "原子核の変形, 対称性の破れ, 殻構造", 原子核研究 **53**, 132–141 (2009).
- (その他)
- Hinohara N., Nakatsukasa T., Matsuo M., and Matuyanagi K.: "Collective path and inertial mass of large-amplitude collective dynamics: Application to shape coexistence", AIP Conf. Proc. **1175**, 49–56 (2009).
- Barbieri C., Charity R. J., Dickhoff W. H., and Sobotka L. G.: "Toward a Global Dispersive Optical Model for the Driplines", Nucl. Phys. A **834**, No. 1/4, pp. 788c–791c (2010).
- [単行本・Proc.]
- (総説)
- Barbieri C.: "Toward an Ab-initio Description of Quasiparticle Properties", Proceedings of the 12th International Conference on Nuclear Reaction Mechanisms, Varenna, Italy, 2009–6, CERN-Proceedings-2010-001, CERN, pp. 137–144 (2010).
- (その他)
- Taniguchi Y., Enyo Y., and Kimura M.: " α clustering and superdeformation of ^{28}Si ", 19th International IUPAP Conference on Few-Body Problems in Physics, Bonn, Germany, 2009–8~9, EPJ Web of Conferences, Les Ulis Cedex, (2010).
- Enyo Y., Hinohara N., Suhara T., and Schuck P.: "Dineutron correlations in nuclear surface", Proceedings of the 12th International Conference on Nuclear Reaction Mechanisms, Varenna, Italy, 2009–6, CERN, Geneva, pp. 291–298 (2010).
- 頭 発 表 Oral Presentations
- (国際会議等)
- Avogadro P. and Nakatsukasa T.: "Does the finite amplitude method allow to obtain easily the QRPA matrix?", Arctic FIDIPRO-EFES Workshop, (University of Jyvaskyla), Saariselka, Finland, Apr. (2009).
- Nakatsukasa T.: "Finite amplitude method and systematic studies of photoresponse in deformed nuclei", Arctic FIDIPRO-EFES Workshop, (University of Jyvaskyla), Saariselka, Finland, Apr. (2009).
- Hinohara N., Nakatsukasa T., Matsuo M., and Matuyanagi K.: "Collective path and inertial mass of large-amplitude collective dynamics: application to shape coexistence", 4th International Workshop on Nuclear Fission and Fission-Product Spectroscopy (FISSION 2009), (CEA), Saint-Paul-lez-Durance, France, May (2009).
- Watanabe G., Orso G., Dalfonso F., Pitaevskii L. P., and Stringari S.: "Properties of superfluid unitary Fermi gases in an optical lattice", Conference on Research Frontiers in Ultra-Cold Atoms, (ICTP), Trieste, Italy, May (2009).
- Nakatsukasa T.: "Finite amplitude method and systematic studies of photoresponse in deformed nuclei", International Conference on Nuclear Structure and Dynamics (NSD09), (University of Zagreb), Dubrovnik, Croatia, May (2009).
- Yoshida K.: "Monopole modes of excitation in deformed neutron-rich Mg isotopes", International Conference on Nuclear Structure and Dynamics (NSD09), (University of Zagreb), Dubrovnik, Croatia, May (2009).
- Yoshida K.: "Collective modes of excitation in deformed neutron-rich nuclei", Workshop on Importance of continuum coupling for nuclei close to the drip-lines, (CEA Saclay), Saclay, France, May (2009).
- Hinohara N.: "Oblate-prolate shape mixing in proton-rich Se isotopes as large-amplitude collective motion", Workshop on Importance of continuum coupling for nuclei close to the drip-lines, (CEA/SPhN), Saclay, France, May (2009).
- Taniguchi Y., Enyo Y., and Kimura M.: "Clustering and shape coexistence in ^{28}Si ", YITP International Workshop on Development of nuclear structure models from the viewpoint of nuclear force, (Yukawa Institute for Theoretical Physics, Kyoto University), Kyoto, May (2009).
- Barbieri C.: "Green's Functions Calculations of Quasiparticle States", YITP International Workshop on Development of nuclear structure models from the viewpoint of nuclear force, (Yukawa Institute for Theoretical Physics), Kyoto, May (2009).
- Nakatsukasa T.: "Recent activities in RIKEN RI Beam Factory: Experiments and theories", 12th International Conference on Nuclear Reaction Mechanisms, (University of Milano), Varenna, Italy, June (2009).
- Barbieri C.: "Toward an Ab-initio Description of Quasiparticle Properties", 12th International Conference on Nuclear Reaction Mechanisms, Varenna, Italy, June (2009).
- Yoshida K.: "Giant monopole resonance and soft monopole mode in neutron-rich Mg isotopes", 3rd International Conference on Collective Motion in Nuclei under Extreme Conditions (COMEX3), (National Superconducting Cyclotron Laboratory (NSCL) at Michigan State University), East Lansing, Michigan, USA, June (2009).

- State University), Mackinac Island, USA, June (2009).
- Nakatsukasa T.: “Finite amplitude method and canonical-basis TDHFB”, Annual UNEDF Collaboration Meetings, (University of Washington), Pack Forest, USA, June (2009).
- Watanabe G.: “Efficient scheme for creating NOON state in a double-well potential”, Cold Atoms and Molecules: Collisions, Field-effects, and Applications, (Kyoto University), Kyoto, June (2009).
- Barbieri C.: “Toward an ab-initio description of single-particle properties”, ECT International Workshop on Confrontation and Convergence in Nuclear Theory, Trento, Italy, July (2009).
- Barbieri C.: “Applicazioni delle funzioni di green agli stati di quasiparticella in atomi e nuclei”, Seminar at the University of Pavia, (University of Pavia), Pavia, Italy, July (2009).
- Barbieri C.: “Applications of many-body theory to derive accurate global optical potentials and predictions at the driplines”, 10th International Conference on Nucleus-Nucleus collisions (NN2009), Beijing, China, Aug. (2009).
- Watanabe G.: “Efficient scheme for creating NOON state in a double-well potential”, Telluride Workshop on Quantum Chemistry and Quantum Computational Physics in the Theory of Ultra-cold Gasses, Telluride, USA, Aug. (2009).
- Taniguchi Y., Enyo Y., and Kimura M.: “ α clustering and superdeformation of ^{28}Si ”, 19th International IUPAP Conference on Few-Body Problems in Physics, Bonn, Germany, Aug.–Sept. (2009).
- Hinohara N.: “Large-amplitude collective dynamics in proton-rich Se isotopes”, 8th CNS-EFES International Summer School (CNS-EFES 09), Wako, Aug.–Sept. (2009).
- Watanabe G.: “Nuclear “pasta”: its formation and consequences”, Conference on Neutron stars: The crust and beyond, (NORDITA), Stockholm, Sweden, Sept. (2009).
- Watanabe G.: “Efficient scheme for creating maximally entangled state in a double-well potential”, International Conference on Quantum Information Processing and Communication (QIPC 2009), (QUROPE and the Sapienza Universita di Roma), Rome, Italy, Sept. (2009).
- Avogadro P. and Nakatsukasa T.: “A method to compute the QRPA”, 3rd Joint Meeting of the APS Division of Nuclear Physics and the Physical Society of Japan (HAW 09), (APS, JPS), Waikoloa, USA, Oct. (2009).
- Kohama A., Iida K., and Oyamatsu K.: “Constructing formula for total reaction cross sections without adjustable energy-dependent parameters”, 3rd Joint Meeting of the Nuclear Physics Divisions of the APS and JPS (Hawaii 2009), Hawaii, USA, Oct. (2009).
- Barbieri C.: “Large-Scale Calculations of Single-Particle Properties”, 3rd Joint Meeting of the Nuclear Physics Divisions of the APS and JPS (Hawaii 2009), Hawaii, USA, Oct. (2009).
- Nakatsukasa T., Hinohara N., Sato K., Matsuo M., and Matuyanagi K.: “Microscopic analysis of large amplitude collective dynamics in triaxial nuclear shapes”, 3rd Joint Meeting of the Nuclear Physics Divisions of the APS and JPS (Hawaii 2009), Hawaii, USA, Oct. (2009).
- Nakatsukasa T.: “Photonuclear reactions studied with the time-dependent density-functional theory”, 3rd Joint Meeting of the Nuclear Physics Divisions of the APS and JPS (Hawaii 2009), Hawaii, USA, Oct. (2009).
- Hinohara N., Sato K., Nakatsukasa T., Matsuo M., and Matuyanagi K.: “Microscopic derivation of five-dimensional collective Hamiltonian of large-amplitude quadrupole motion: application to shape coexistence in proton-rich Se isotopes”, 7th Japan-China Joint Nuclear Physics Symposium, (Univ. of Tsukuba), Tsukuba, Nov. (2009).
- Hinohara N., Sato K., Nakatsukasa T., Matsuo M., and Matuyanagi K.: “Large-amplitude quadrupole collective dynamics in Se and Kr isotopes”, Hadron and Nuclear Physics (HNP09), (RCNP, Osaka Univ.), Suita, Nov. (2009).
- Watanabe G.: “Study of matter in ultradense and ultradilute environments: towards bridging astrophysics and cold atom physics”, Symposium on Fields of Special Interests in Theoretical Physics, (Asia Pacific Center for Theoretical Physics), Pohang, Korea, Nov. (2009).
- Hinohara N., Sato K., Nakatsukasa T., Matsuo M., and Matuyanagi K.: “Large-amplitude quadrupole collective dynamics of shape coexistence phenomena in proton-rich Se and Kr isotopes”, Tours Symposium on Nuclear Physics and Astrophysics VII (TOURS 2009), (Konan Univ.), Kobe, Nov. (2009).
- Hinohara N.: “Five-dimensional collective Hamiltonian with Thouless-Valatin inertial functions”, JUSTIPEN-EFES Workshop on Unstable Nuclei, Wako, Dec. (2009).
- Barbieri C.: “Ground states and single particle energies from Green’s function theory”, JUSTIPEN-EFES Workshop on Unstable Nuclei, Wako, Dec. (2009).
- Taniguchi Y., Kimura M., Enyo Y., Ikeda K., Horiuchi H., and Ideguchi E.: “Triaxial superdeformation in ^{40}Ar ”, JUSTIPEN-EFES Workshop on Unstable Nuclei, Wako, Dec. (2009).
- Watanabe G.: “Formation of nuclear “pasta” in supernovae”, RIKEN-TRIUMF Nuclear Theory Meeting, (TRIUMF and RIKEN), Vancouver, Canada, Dec. (2009).
- Nakatsukasa T.: “Global fitting of the pairing functional”, RIKEN-TRIUMF Nuclear Theory Meeting, Vancouver, Canada, Dec. (2009).
- Watanabe G.: “Formation of nuclear pasta in supernovae”, Mini Symposium on Nuclear Astrophysics in “New Frontiers in QCD 2010”, (Yukawa Institute for Theoretical

- Physics), Kyoto, Jan. (2010).
- Ebata S., Nakatsukasa T., Inakura T., Hashimoto Y., and Yabana K.: "Linear Response Calculation using Canonical-basis TDHFB with a schematic pairing functional", ICHOR-EFES International Symposium on New Facet of Spin-Isospin Responses, (Department of Physics, School of Science, University of Tokyo), Toshiba Hall, University of Tokyo, Feb. (2010).
- Hinohara N.: "Beyond mean-field description of low-lying states of nuclei", ICHOR-EFES International Symposium on New Facet of Spin-Isospin Responses (SIR2010), (University of Tokyo), Tokyo, Feb. (2010).
- Barbieri C.: "Pygmy dipole response of proton-rich argon nuclei in random-phase approximation and no-core shell model", ICHOR-EFES International Symposium on New Facet of Spin-Isospin Responses (SIR2010), (Tokyo University/CNS), Tokyo, Feb. (2010).
- Yoshida K.: "Pygmy mode in deformed neutron-rich nuclei", ICHOR-EFES International Symposium on New Facet of Spin-Isospin Responses (SIR2010), Tokyo, Feb. (2010).
- Yoshida K.: "Low-lying Excitations and Giant Resonances in Deformed Mg Isotopes", 4th LACM-EFES-JUSTIPEN Workshop, Oak Ridge, USA, Mar. (2010).
- Ebata S., Nakatsukasa T., Inakura T., Hashimoto Y., and Yabana K.: "Linear Response Calculation using Canonical-basis TDHFB with a schematic pairing functional", International Symposium on Exotic Nuclear Structures, (Center for RI Beam Sciences, Niigata University), Hotel BELNATIO, Tokamachi, Niigata, Mar. (2010).
- Yoshida K.: "Collective modes of excitation in deformed neutron-rich Mg isotopes", International Symposium on Forefronts of Researches in Exotic Nuclear Structures (Niigata2010), (Niigata University), Niigata, Mar. (2010).
- Barbieri C.: "Ground and Single-Particle States from Green's Function Theory", International Symposium on Forefronts of Researches in Exotic Nuclear Structures (Niigata2010), (Niigata University), Tokamachi, Niigata Pref., Mar. (2010).
- Sato K., Hinohara N., Nakatsukasa T., Matsuo M., and Matuyanagi K.: "Microscopic analysis of shape mixing in low-lying states of proton-rich Kr isotopes", International Symposium on Forefronts of Researches in Exotic Nuclear Structures (Niigata2010), (Niigata University), Tokamachi, Niigata Pref., Mar. (2010).
- Hinohara N., Sato K., Nakatsukasa T., Matsuo M., and Matuyanagi K.: "Microscopic approach to adiabatic large-amplitude quadrupole collective dynamics in Se isotopes", International Symposium on Forefronts of Researches in Exotic Nuclear Structures (Niigata2010), (Niigata Univ.), Tokamachi, Niigata Pref., Mar. (2010).
- Sato K., Hinohara N., Nakatsukasa T., Matsuo M., and Matuyanagi K.: "Phenomenological analysis of the oblate-prolate symmetry breaking in triaxial deformation dynamics", International Symposium on Forefronts of Researches in Exotic Nuclear Structures (Niigata2010), (Niigata University), Tokamachi, Niigata Pref., Mar. (2010).
- Kohama A.: "Total reaction cross sections of light neutron-rich nuclei in the Glauber approximation", International Symposium on Forefronts of Researches in Exotic Nuclear Structures (Niigata2010), (Niigata University), Tokamachi, Niigata Pref., Mar. (2010).
- Taniguchi Y.: "Triaxial superdeformation in ^{40}Ar ", International Symposium on Forefronts of Researches in Exotic Nuclear Structures (Niigata2010), (Niigata University), Tokamachi, Niigata Pref., Mar. (2010).
- Ebata S., Nakatsukasa T., Inakura T., Hashimoto Y., and Yabana K.: "Linear Response Calculation using Canonical-basis TDHFB with a schematic pairing functional", The 10th. International Symposium on Origin of Matter and Evolution of the Galaxies, (Research Center for Nuclear Physics, Osaka University), RCNP, Osaka University, Ibaraki, Osaka, Mar. (2010).
- Avogadro P. and Nakatsukasa T.: "Finite amplitude method for the QRPA", International Symposium on Forefronts of Researches in Exotic Nuclear Structures (Niigata2010), (Niigata University), Tokamachi, Niigata Pref., Mar.-Mar. (2010).
- (国内会議)
- Barbieri C.: "Green's Functions Calculations of Spectroscopic Factors", 日本物理学会第 64 回年次大会, 東京, 3 月 (2009).
- 吉田賢市: "Low-frequency vibrational modes in neutron-rich Mg isotopes close to the drip line", 日本物理学会第 64 回年次大会, 東京, 3 月 (2009).
- 小濱洋央, 飯田圭, 親松和浩: "くろたま断面積の質量数依存性", 日本物理学会第 64 回年次大会, 東京, 3 月 (2009).
- 小笠原弘道, 吉田賢市, 水鳥正二郎, 山上雅之, 松柳研一: "超変形 ^{40}Ca の高スピン状態に於ける負パリティ励起モードに対する RPA 計算", 日本物理学会第 64 回年次大会, 東京, 3 月 (2009).
- 中務孝: "密度汎関数理論による計算核データ", Numazu Workshop 2009 「クオーク力学・原子核構造に基づく爆発的天体现象と元素合成」, (沼津高等専門学校), 沼津, 3 月 (2009).
- 小濱洋央: "高エネルギー核反応データ収集への期待: データベースユーザの立場から", RIBF ミニワークショップ「核データと核理論」, 和光, 3 月 (2009).
- 中務孝: "計算核データ構築に向けて", RIBF ミニワークショップ「核データと核理論」, 和光, 3 月 (2009).
- 中務孝: "有限振幅法による中重領域核の光吸収断面積", 第 5 回「計算科学による新たな知の発見・統合・創出」シンポジウム, (筑波大学), つくば, 5 月 (2009).
- 小濱洋央: "Purpose of this WS and the overview: how to deduce charge densities", RIBF ミニワークショップ "Electron Scattering data needed for the charge-density determination of unstable nuclei", 和光, 5 月 (2009).

- 小濱洋央: “Systematic analyses of total reaction cross sections using the black-sphere picture of nuclei”, RIBF ミニワークショップ “One goal, different approaches - how to predict total reaction cross sections”, 和光, 5 月 (2009).
- 中務孝: “密度汎関数理論の最近の発展”, 宇宙核物理連絡協議会主催第 2 回研究戦略ワークショップ「日本の核データ～天と地の核エネルギー」,(宇宙核物理連絡協議会), 和光, 7 月 (2009).
- Barbieri C.: “Toward an “ab-initio” Description of Single-Particle Properties”, 千葉大学自然科学研究科原子核理論セミナー, (Chiba university), Chiba university, 7 月 (2009).
- 吉田賢市: “Collectivity in nuclei at around and beyond the island of inversion”, 東京工業大学理学部物理学科セミナー, 東京, 7 月 (2009).
- 渡辺元太郎: “Efficient scheme for creating NOON state in a double-well potential”, Workshop on Quantum Foundations for Young Researchers: From Mathematical Physics to Experimental Physics, (量子に関する関東 Student Chapter), 東京, 7 月 (2009).
- 日野原伸生: “原子核の低励起状態における大振幅集団ダイナミクス”, KEK 理論センター研究会「原子核・ハドロン物理」, つくば, 8 月 (2009).
- 江幡修一郎, 中務孝, 稲倉恒法, 橋本幸男, 矢花一浩: “Skyrme-TDHF+“BCS”を用いた線形応答計算”, KEK 理論センター研究会「原子核・ハドロン物理」, (高エネルギー加速器研究機構, 素粒子原子核研究所), つくば, 8 月 (2009).
- 中務孝: “密度汎関数理論による核構造と核反応”, KEK 理論センター研究会「原子核・ハドロン物理」, (KEK), つくば, 8 月 (2009).
- 吉田賢市: “Pygmy mode in deformed neutron-rich Mg isotopes close to the drip line”, RCNP ミニワークショップ「原子核の E1,M1 励起モードの探究と今後の戦略」, (大阪大学核物理研究センター), 茨木, 8 月 (2009).
- 日野原伸生: “原子核低励起状態における大振幅集団運動”, 筑波大学原子核理論セミナー, つくば, 9 月 (2009).
- 渡辺元太郎: “Efficient scheme for creating NOON state in a double-well potential: assisted higher-order cotunneling”, 筑波大学原子核理論研究室セミナー, (筑波大学), 筑波, 9 月 (2009).
- 渡辺元太郎: “分子動力学法でせまる原子核のパスタ相:超新星コアにおけるパスタ相の形成”, 早稲田大学 山田・前田研合同セミナー, (早稲田大学), 東京, 11 月 (2009).
- Avogadro P., 中務孝: “A tool to solve the QRPA problem fully self-consistently and with no symmetry restriction”, JUSTIPEN Workshop, 和光, 12 月 (2009).
- 渡辺元太郎: “超新星爆発におけるパスタ相の形成”, 日本学術振興会科学研究費基盤研究 S2010 「超新星の爆発機構とガンマ線バースト源エンジンの統一的解明」, (日本学術振興会、国立天文台、明星大学), 東京, 1 月 (2010).
- Barbieri C.: “Toward an accurate understanding of optical models and single-particle states in exotic nuclei”, RIBF 核物理セミナー, Wako, 1 月 (2010).
- 吉田賢市: “Core polarization for the electric quadrupole moment of neutron-rich Aluminum isotopes”, 日本物理学会第 65 回年次大会, 岡山, 3 月 (2010).
- 渡辺元太郎: “時間変調トンネル確率による NOON 状態の効率的な生成”, 日本物理学会第 65 回年次大会, (日本物理学会), 岡山, 3 月 (2010).
- 佐藤弘一, 日野原伸生: “5 次元四重極集団 Hamiltonian を用いた Kr 同位体における変形共存の微視的解析”, 日本物理学会第 65 回年次大会, 岡山, 3 月 (2010).
- 吉田賢市: “Skyrme density-functional approach to excitation modes in deformed neutron-rich nuclei”, 日本物理学会第 65 回年次大会, 岡山, 3 月 (2010).
- 日野原伸生, 佐藤弘一, 中務孝, 松尾正之, 松柳研一: “四重極集団 Hamiltonian による Se 同位体の低励起状態の系統的記述”, 日本物理学会第 65 回年次大会, 岡山, 3 月 (2010).
- 江幡修一郎, 中務孝, 稲倉恒法, 橋本幸男, 矢花一浩: “中重核に対する Skyrme-TDHF+“BCS”的アプローチ”, 日本物理学会第 65 回年次大会, 岡山, 3 月 (2010).
- 小濱洋央, 飯田圭, 親松和浩, 岩瀬広, 仁井田浩二: “重核+重核反応の全反応断面積”, 日本物理学会第 65 回年次大会, 岡山, 3 月 (2010).
- 谷口億宇: “ ^{40}Ar の非軸対称超変形状態”, 日本物理学会第 65 回年次大会, 岡山, 3 月 (2010).