

2nd German-Japanese Workshop on Nuclear Structure and Astrophysics

4-7 October 2006, meeting room RIBF building 2F, RIKEN

4/Oct

9:30 -- Chair: N. Itagaki

OPENING

Y. Yano

P. Ring

9:40 – 12:10 Chair: N. Itagaki

H. Wolter (25+5) Direct reactions for exotic nuclei and astrophysics

C. Fuchs (25+5) Relativistic Brueckner theory

T. Buervenich (25+5) Mean Field Description of Exotic Nuclei

C. Barbieri (25+5) Green's function RPA studies of spectroscopic properties

Lunch

13:30 – 15:30 Chair: H. Horiuchi

M. Matsuo (25+5) Pairing induced collectivity in neutron-rich nuclei

P. Ring (25+5) Covariant density functional theory beyond the mean field approach

R. Roth (25+5) Nuclear Structure with Correlated Realistic NN-interactions

S. Bacca (25+5) Test of the Unitary Correlation Method in the continuum: Photoabsorption cross section

Break

16:00 --- 18:45 Chair: S. Shimoura

N. Paar (25+5) Collective Nuclear Motion Based on Correlated NN interactions and relativistic density-dependent models

N. Itagaki (25+5) liquid-, gas-, solid- structure of light neutron-rich nuclei

H. Feldmeier (25+5) Nuclear reactions within Fermionic Molecular Dynamics

Y. Suzuki(Niigata 12+3) Structure of carbon isotopes studied with the analysis of reaction cross sections

W. Horiuchi(Niigata 12+3) Structure of ^{22}C in a three-body model

S. Fujii (12+3) Microscopic shell-model description of neutron-rich carbon isotopes

A. Umeya (12+3) Quadrupole motion in light neutron-rich nuclei

T. Inakura (12+3) Collectivity of low-lying dipole modes in spherical Ni isotopes and deformed Fe nucleus

19:00 ~ Reception (Lounge near the conference hall)

5/Oct

9:30 – 12:00 Chair: T. Motobayashi

J. Maruhn (25+5) TDHF in three dimensions with Full Skyrme Forces: Surprises and Problems

K. Yabana (25+5) Time-dependent approaches for nuclear reaction and response

H. Emling (25+5) Pygmy resonances

T. Nakamura (25+5) Invariant-mass Spectroscopy of neutron-halo nuclei

K. Kato (25+5) Bound, resonant and continuum states in the complex scaling method

Lunch

13:00 – 15:00 Chair: K. Kobayashi

R. Kruecken (25+5) NUSTAR@FAIR: Experimental Perspectives for Studies of Exotic Nuclei

N. Aoi (25+5) gamma spectroscopy with fast RI beams

M. Gorska (25+5) Structure of exotic nuclei observed in RISING

Y. Utsuno (25+5) Significance of tensor force in the structure of exotic nuclei around $N=28$

H. Sakurai (25+5) RIBF

Break

16:00 --- 19:15 H. Emling

W. Plass (25+5) Mass and lifetime measurements at GSI for nuclear structure and astrophysics
T. Suzuki (Saitama 25+5) Nuclear radii of unstable nuclei and related topics
P. von Neumann-Cosel (25+5) Experimental Tests of a Parity Dependence of Level Densities
Deduced from the Fine Structure of Giant Resonances
S. Shimoura(12+3)High resolution spectroscopy using RI beams --- SHARAQ project
H. Nakada (12+3) Unified description of nuclear structure and elastic scattering
A. Saito (12+3) Exotic cluster states in ^{12}Be via alpha-inelastic scattering
T. Nakatsukasa (12+3) Convergent configuration-mixing calculation for light nuclei with mean-field Hamiltonian
H. Baba (12+3) Highly excited states of ^{14}O with the (α,α') reaction
M. Kimura (12+3) Alpha clustering, molecular-orbitals and breaking of N=20 magic number in F isotopes

19:15 ~ Dinner (Lounge near the conference hall)

6/Oct.

9:30 --- 12:00 Chair: K. Langanke

S. Kubono (25+5) Nuclear Astrophysics Study at CRIB
M. Heil (25+5) A new measurement of the $^{14}\text{C}(n,g)^{15}\text{C}$ reaction
S. Wanajo (25+5) Nucleosynthesis in Neutrino-Driven Winds of Core-Collapse Supernovae
G. Martinez-Pinedo (25+5) r-Process and nuclear structure
W. Aoki (25+5) Observational studies of heavy elements in metal-deficient stars

Lunch

13:30 - 15:00 facility tour

Short theory presentations and experimental discussion session in parallel

Theory Session 15:00 – 18:00 Chair: T. Otsuka

Y. Motizuki (12+3) The late-time supernova evolution induced by anisotropic neutrino radiation and the r-process environment (I)

H. Madokoro (12+3) The late-time supernova evolution induced by anisotropic neutrino radiation and the r-process environment (II) - Effect of neutrino interactions
Y. Funaki (12+3) 4alpha condensed state in ^{16}O
T. Yamada (12+3) Single alpha-particle orbits and condensation in light nuclei
C. Kurokawa (12+3) Structure of Resonance states in ^{12}C
K. Tanabe (12+3) Classification of the TSD bands in odd mass nuclei
K. Sugawara-Tanabe (12+3) Application of Elliott SU(3) model to the triaxial Nucleus
M. Yamagami (12+3) Pairing effects for collective excitations in weakly-bound nuclei
T. Myo (12+3) Role of the tensor and pairing correlations in neutron halo nuclei
T. Togashi (12+3) Brueckner-AMD method and its applications to light nuclei
A. Haga (12+3) Role of vacuum polarization in quantum hadrodynamics
H. Aiba (12+3) Fluctuation of the strength function of giant resonances: A comparison of light and heavy nuclei
M. Ito (12+3) Absorbing-kernels to study resonances in the generator coordinate method

18:30 ~ 20:30 Banquet (RIKEN cafeteria)

7/Oct.

9:30 – 12:15 Chair: H. Ejiri

H. Ejiri (10) Introduction on double beta decay
D. Frekers (25+5) Double beta decay
M. Nomachi (15+5) Double Beta Decay: MOON and future experiments
H. Ohsumi (15+5) NEMO-3 Double Beta Decay Experiment
K. Muto (25+5) QRPA approach to double beta decay
M. Honma (25+5) Weak and magnetic properties of pf and pfg nuclei
K. Yako (15+5) Study of intermediate states of double-beta decay nuclei via (p,n) and (n,p) reactions

Lunch

13:15 --- 14:45 Chair: T. Kajino

H. Toki (25+5) Pions in the relativistic mean field approximation and the tensor correlation in He4

D. Savran (25+5) Investigations of the Pygmy Dipole Resonance in Coincidence Exp.
K. Ogata (25+5) Recent developments of the Continuum-Discretized Coupled-Channels method and its application to nuclear astrophysics

break

15:15 --- 17:15 Chair K. Yabana

Y. Kanada-En'yo (25+5) ^{12}C 2nd 0^+ state and its family in the vicinity

C. Ozen (25+5) Shell model Monte Carlo of Nuclei around ^{90}Zr

F. Minato (12+3) Screening effect for nucleus-neutrino reaction

S. Tamenaga (12+3) Coleman-Weinberg mechanism with chiral symmetry for nuclear structure

T. Shima (12+3) Experimental studies of nuclear astrophysics with keV neutrons

T. Teranishi (12+3) Spectroscopy of light unstable nuclei using elastic resonance scattering

CLOSING --- 17:30

K. Langanke

T. Otsuka