"Nuclear equation of state and hyper nuclear physics"

4-31 January 2013,

at Yukawa Institute for Theoretical Physics (YITP), Kyoto University

Seminars → at room K102 in the Research building, YITP

Workshop on 18 and 19 → at Panasonic hall in the Yukawa memorial building, YITP

7 January

13:30 at K102

* M. Isaka (Hokkaido) Structure of p-sd shell Lambda hypernuclei studied with antisymmetrized molecular dynamics

10 January

11:00 at K102

* S. Hirenzaki (Nara W U.) Meson Properties at Finite Density from Mesic Atoms and Mesic Nuclei

16:00 at Panasonic hall

* H.-J. Schulze (Catania, YITP) YITP colloquium, Strange Neutron Starts

11 January

13:00 at K102

- * T. Muto (Chiba Tech.) Interplay between antikaons and hyperons in finite nuclei 14:00 at K102
- * H. Noumi (RCNP) Precision measurement of Lambda single particle energy 15:30 at K102
- * H. Toki (RCNP) Structures nuclei generated by pions and hyper nuclear structure

15 January

13;30 at K102

- * Y. Yamamoto (Tsuru) multi-pomeron exchange repulsion and the neutron-star mass 15:00 at K102
- * K. Sasaki (Tsukuba) Lattice QCD studies of s-wave baryon-baryon interactions with strangeness

16 January

11:00 at K102

S. Ando (Daegu) Three-body systems in Halo/Cluster effective field theory

17 January

11:00 at K102

* N. Yasutake (Chiba Tech.) Finite-size effects in quark-hadron phase transition and the structure of compact stars

14:00 at K102

* H. Nemura (Tsukuba) Hyperonic nuclear forces from lattice QCD and toward an application to few-body systems

15:30 at K102

* S. Nakamura (Tohoku) Electro-production of Lambda hypernuclei

18 January (workshop) Panasonic hall

Chair: N. Itagaki (YITP)

10:00~11:00 (50+10) G. Baym (Illinois) 'Physics of Neutron Stars'

 $11:00\sim11:45$ (40+5) T. Takatsuka (Iwate) 'Hyperon-Mixed Neutron Stars and Cooling Problems'

11:45 \sim 12:15 (25+5) A. Ohnishi (YITP) "Three-body coupling effects in relativistic mean field for dense matter EOS"

12:15~14:00 Lunch

Chair: E. Hiyama(RIKEN)

 $14{:}00{\sim}14{:}30~(25{+}5)$ T. Inoue (Nihon) 'Nuclear matter and Hyperon in medium from Lattice QCD'

 $14:30\sim15:00$ (25+5) K. Miwa (Tohoku) 'Study of Sigma N interaction by scattering experiment'

 $15:00\sim15:15$ break

Chair: A. Ohnishi (YITP)

 $15{:}15\sim16{:}00(40{+}5)$ H. Tamura (Tohoku) 'Prospect of hypernuclear gamma-ray spectroscopy'

 $16:00\sim16:30$ (25+5) M. Iwasaki (RIKEN) 'J-PARC E15: an experimental search for deeply bound kaonic state'

 $16:30\sim17:00~(25+5)~\mathrm{K.}$ Itahashi (RIKEN) 'Spectroscopy of pionic atoms and eta' mesic nuclei'

 $17:00\sim17:30(25+5)$ T. Myo (Osaka Tech.) Tensor-optimized shell model for light nuclei with bare interaction'

 $18:00 \sim 20:00$ Dinner

19 January (workshop) Panasonic hall

Chair: H-J. Schulze(Catania, YITP)

10:00∼11:00 (50+10) T. Rijken (Nijmegen) 'Baryon-baryon interaction'

11:00~11:30(25+5) A. Umeya (Nihon) 'Light Lambda-hypernuclei taking into account Lambda N - Sigma N coupling explicitly with tensor optimized shell model

 $11:\!30 \sim 12:\!00(25+5)$ K. Tanida (Seoul) 'Experiments on Xi-Nucleus interaction at J-PARC'

12:00~13:00 Lunch

Chair: H. Fujioka (Kyoto)

 $13:00\sim13:45$ (40+5) K. Imai (JAEA) 'Exotic nuclei and hadrons with multi-strangeness' $13:45\sim14:15$ (25+5) H. Outa (RIKEN) 'Non-msonic weak decay of Lambda hypernuclei -- results at KEK-PS and plan of J-PARC experiments'

 $14:15\sim 14:30$ break

Chair: T. Rijken (Nijmegen)

 $14:30\sim15:15$ (40+5) H. Sagawa (Aizu) 'Giant resonances, EOS and hyperons' $15:15\sim15:45$ (25+5) J. Hu (Peking) 'The effective Lambda-N potential from relativistic Brueckner-Hartree-Fock theory'

21 January

14:00 at K102

* K. Tanida (Seoul) Experimental study of Xi potential in a nucleus from X-ray measurement

22 January

11:00 at K102

* T. Koike (RIKEN) Xi- hypernuclear formation via (K-, K+) reaction

25 January

13:30 at K102

* K. Fukukawa (RIKEN) Quark-Model Hyperon-Hyperon Interactions

28 January

14:00 at K102

* K. Nakazawa (Gifu) Experiment for Double-Hypernuclei with Nuclear Emulsion (in the afternoon)

15:30 at K102

* J. Meng (Peking) Selected topics in CDFT

29 January

11:00 at K102

* S G. Zhou (Institute of Theoretical Physics) Halo in deformed nuclei from covariant density functional theories

13:30 at K102

* X-R. Zhou (Xiamen) Structure of hyper nuclei studied with Skyrme Hartree-Fock method

15:00 at K102

* A. Li (RIKEN) Pairing and tensor effects on the deformation of neon isotopes and corresponding Lambda hypernuclei

30 January

11:00 at K102

* Bing-Nan Lu (Institute of Theoretical Physics)

Quadrupole deformation (β, γ) of light Λ hypernuclei in a constrained relativistic mean field model