

PROGRAM: RIBF Symposium

Probing Neutron-Proton Pair Correlations

– pairing models, cross section measurements and reaction mechanisms

Nov. 19-20, 2010, RIKEN, Wako Campus, Japan

November 19th (Friday)

09:00 – 09:10 H. Sakurai (RIKEN) - Opening remark

Chair: N. Aoi (RIKEN)

Talk (40+5 mins)

09:10 – 09:55 A. O. Macchiavelli (LBNL) – Overview of the np-pairing problems

Coffee Break (30 mins)

Talk (35+5 mins)

10:25 – 11:05 G. Bertsch (U. Wash) – Spin-triplet neutron-proton pairing and its observation

11:05 – 11:45 M. Matsuo (Niigate) – Spatial correlation and enhanced pair transfers

11:45 – 12:25 J. Meng (Peking) – Shell-Like APproach (SLAP) for pairing correlation based on Mean Field

Lunch (80 mins)

Chair: Y. Utsuno (JAEA)

Talk (35+5 mins)

13:45 – 14:25 Y. Sun (SJTU) – Structure along the N=Z line studied by interacting shell models

14:25 – 15:05 M. Horoi (CMU) – Proton-neutron pairing correlations in nuclei: a shell model perspective

Coffee Break (30 mins)

15:35 – 16:15 P. Van Isacker (GANIL) – Aligned neutron-proton pairs in N=Z nuclei

Chair: K. Matsuyanagi (Kyoto)

16:15 – 17:15 Discussion Section: Structure theories on np-pairing

November 20th (Saturday)

Chair: T. Motobayashi (RIKEN)

Talk (25+5 mins)

09:00 – 09:30 A. O. Macchiavelli (LBNL) – Studies of np-pairing using transfer reactions

09:30 – 10:00 J. Lee (RIKEN) – Experimental prospects - Probing np-pair correlations using knockout reactions

Coffee Break (30 mins)

Talk (35+5 mins)

10:30 – 11:10 J. A. Tostevin (Surrey) – Fast two-nucleon removal reactions and their sensitivity

11:10 – 11:50 I. Thompson (LLNL) – Simultaneous and sequential contributions to two-nucleon transfer reactions

Lunch (80 mins)

Chair: S. Shimoura (CNS)

Talk (15+5 mins)

13:10 – 13:30 A. Tamii (RCNP) – Proton-neutron tensor correlation studied by measuring spin-M1 strengths in self-conjugate even-even nuclei

13:30 – 13:50 Y. Fujita (Osaka) – Formation of Gamow-Teller Resonance structure in $T_z=0$, odd-odd f-shell nuclei

13:50 – 14:10 C. Barbieri (Surrey) – Correlated pp and pn pairs probed with $^{16}\text{O}(e,e'pN)$

14:10 – 14:30 S. G. Zhou (ITP/CAS, Beijing) – Particle-number conserving analysis of rotational bands in $^{247,249}\text{Cm}$ and ^{249}Cf

Coffee Break (30 mins)

Chair: G. Bertsch (U. Wash) and N. Aoi (RIKEN)

15:00 – 17:00 Discussion Section: Plans making – cross section measurements
coupled with structure and reaction theories & future experiments for np
pair correlations

17:00 – 17:05 J. Lee (RIKEN) - Closing

Organizing Committee

Jenny Lee, Nori Aoi, Hiroyoshi Sakurai (RIKEN)