

February 28, 2004

PRELIMINARY PROGRAM
Workshop on SPECTROSCOPIC FACTORS

ECT*, Trento 2nd-12th March 2004

Tuesday March 2nd

Chair: R. Siemssen

- 9:25 W. Weise weise@ect.it
Welcome
- 9:30-10:20 S. Galès gales@ipno.in2p3.fr
Single-particle absolute spectroscopic factors : the quest, from bound states to resonances.
- 10:20-11:10 L. Lapikás louk@nikhef.nl
Spectroscopic factors from (e,e'p) reactions.
- 11:10-11:40 Coffee break
- 11:40-12:30 T. Otsuka otsuka@phys.s.u-tokyo.ac.jp
Single-particle states in exotic nuclei.
- 12:30-14:00 LUNCH

Chair: M. Ishihara

- 14:00-14:50 P.G. Hansen hansen@nscl.msu.edu
Absolute spectroscopic factors from radioactive-beam experiments.
- 14:50-15:40 I. Sick sick@ubaclu.unibas.ch
Correlated spectral function from (e,e'p).
- 15:40-16:10 Break
- 16:10-16:50 A. Bonaccorso angela.bonaccorso@pi.infn.it
Single particle states in the continuum.

Wednesday March 3rd

Chair: T. Otsuka

- 9:30-10:20 J. P. Schiffer schiffer@anl.gov
Single-Particle States and Evidence for Changes in the Spin-Orbit Interaction with Neutron Excess.
- 10:20-11:10 J. Tostevin j.tostevin@surrey.ac.uk
Methods and lessons from direct reaction theory.
- 11:10-11:40 Coffee break
- 11:40-12:20 P. Schuck schuck@ipno.in2p3.fr
Alpha particle condensation in threshold states of lighter nuclei.
- 12:20-13:00 T. Glasmacher Glasmacher@nscl.msu.edu
Direct Reactions of Exotic beams with Gamma-Ray Spectroscopy.

13:00-14:30 LUNCH

Chair: I. Sick

- 14:30-15:20 O. Benhar benhar@roma1.infn.it
Dependence of the spectroscopic factors extracted from ($e,e'p$) data on the transferred momentum.
- 15:20-16:10 M. Strikman strikman@phys.psu.edu
High Q^2 $e,e'p$ reactions.
- 16:10-16:40 Break

Thursday March 4th

Chair: S. Galès

- 9:30-10:20 T. Aumann T.Aumann@gsi.de
Spectroscopic Factors from Coulomb Breakup Measurements.
- 10:20-11:10 E. Jans eddy@nikhef.nl
Electro-induced two-nucleon knockout reactions on ${}^3\text{He}$.
- 11:10-11:40 Coffee break
- 11:40-12:30 W. H. Dickhoff wimd@wuphys.wustl.edu
Proton properties in the nucleus - quantum physics at all energy scales.
- 12:30-14:00 LUNCH

Chair: A. Cunsolo

- 14:00-14:40 S. Typel typel@tplx21.gsi.de
Final-state effects in the electromagnetic breakup of exotic nuclei.
- 14:40-15:20 P. Roussel Chomaz patricia.chomaz@ganil.fr
Study of the ground state wave function of ${}^6\text{He}$ via the 2-neutron transfer reaction ${}^6\text{He}(\text{p},\text{t})\alpha$.
- 15:20-15:50 Break
- 15:50-16:30 F.Cappuzzello Cappuzzello@lns.infn.it
Spectroscopic studies with the MAGNEX spectrometer.
- 16:30-17:00 C. Nociforo nociforo@lns.infn.it
Ground-state configuration of ${}^{23}\text{O}$ investigated via Coulomb breakup.

Friday March 5th

Chair: L. Lapikas

- 9:30-10:10 M. Ishihara ishihara@rarfaxp.riken.go.jp
Anomalous reduction of E2 effective charge in light neutron rich isotopes.
 - 10:10-10:50 J. Ryckebusch jan.ryckebusch@rug.ac.be
Nuclear Transparencies in A(e,e'p) reactions.
 - 10:50-11:20 Coffee break
 - 11:20-12:00 J. S. Vaagen jans.vaagen@fi.uib.no
Correlation Maps for Borromean Halo Continua.
 - 12:00-12:50 S. Shimoura shimoura@cns.s.u-tokyo.ac.jp
Proton single-particle states in neutron-rich nuclei via (α,t) reactions at intermediate energy.
 - 12:50-14:20 LUNCH
- Chair: J. P. Schiffer*
- 14:20-14:50 H. Scheit Heiko.Scheit@mpi-hd.mpg.de
The neutron-rich Na and Mg isotopes studied at REX-ISOLDE.
 - 14:50-15:20 M. Horoi horoi@phy.cmich.edu
Role of Spectroscopic Factors in the Weak Proton Decay of the Neutron Rich ^{11}Be .
 - 15:20-16:20 R. Siemssen siemssen@kvi.nl
Summary of week I and *Laudatio* of Sydney.
 - 16:20-16:50 Break
 - 20:00 Week I conference dinner: Toast to Sydney by G. Crawley
Crawley@cosm.sc.edu.

Monday March 8th

Chair: P.G. Hansen

- 9:30-10:20 C. Giusti giusti@pv.infn.it
Correlations and Electromagnetic Knockout Reactions.
 - 10:20-11:10 B.A. Brown Brown@nscl.msu.edu
Spectroscopic factors and configuration mixing.
 - 11:10-11:40 Coffee break
 - 11:40-12:30 C. Ciofi degli Atti Claudio.Ciofi@pg.infn.it
The hadronic response to lepton probes at high nucleon momenta and removal energies.
 - 12:30-14:00 LUNCH
- Chair: A. Fabrocini*
- 14:00-14:30 J. Escher escher1@llnl.gov
Proton emission and spectroscopic factors.
 - 14:30-15:10 M. Freer M.Freer@bham.ac.uk
Spectroscopic information from breakup reactions of boron and beryllium nuclei.
 - 15:10-15:40 Break
 - 15:40-16:10 C. Barbieri barbieri@triumf.ca
Spectroscopic factors and limits of the mean field approximation. Applications to proton decay and capture.
 - 16:10-16:40 A. Garcia-Camacho A.Garcia-Camacho@surrey.ac.uk
Spin-orbit effects in knock-out reactions.

Tuesday March 9th

Chair: D.M. Brink

- 9:30-10:20 J. W. Watson jwatson@kent.edu
Short Range Correlations in $^{12}\text{C}(\text{p},2\text{p} + \text{n})$ and $^{12}\text{C}(\text{e},\text{e}'\text{p} + \text{N})$.
- 10:20-11:10 J.J. Kelly kelly@enp.umd.edu
Influence of the Dirac Sea on Nucleon Electromagnetic Knockout.
- 11:10-11:40 Coffee break
- 11:40-12:30 G. Baur g.baur@fz-juelich.de
Direct Reactions with Exotic Nuclei.
- 12:30-14:00 LUNCH

Chair B.A. Brown

- 14:00-14:40 T. Nakamura nakamura@ap.titech.ac.jp
Coulomb breakup and spectroscopic factors.
- 14:40-15:20 A.A. Korsheninnikov alexei@riken.jp
Recent experimental studies of exotic nuclei.
- 15:20-15:50 Break
- 15:50-16:20 F. Delaunay delaunay@nscl.msu.edu
Excited states of ^{11}Be studied via the $^{10}\text{Be}(\text{d},\text{p})^{11}\text{Be}$ reaction in inverse kinematics.
- 16:20-16:50 U. Datta Pramanik ushasi@anp.saha.ernet.in
Proton removal reactions and spectroscopic factors.

Wednesday March 10th

Chair: H. Emling

- 9:30-10:10 A. Dieperink dieperink@kvi.nl
Tensor correlations in nuclear matter treated in the self-consistent Green function method.
- 10:10-10:50 S. Fortier fortier@ipno.in2p3.fr
Alpha-particle transfer in light nuclei: Application to the search for Tetraneutron.
- 10:50-11:20 Coffee break
- 11:20-12:00 L. Trache l-trache@tamu.edu
Spectroscopic factors versus Asymptotic Normalization Coefficients from breakup and transfer reactions with loosely bound nuclei.
- 12:00-12:30 L. Gaudefroy gaudefro@ipno.in2p3.fr
Neutron-capture cross sections around neutron-rich magic nuclei for astrophysical purposes.
- 12:30-14:00 LUNCH

Chair: S. Fortier

- 14:00-14:40 F.Carstoiu carstoiu@theory.nipne.ro
Extended sudden approximation for one nucleon removal reactions.
- 14:40-15:20 N. Vinh Mau vinhmau@ipno.in2p3.fr
Spectroscopic factors for ^{12}Be and ^{13}Be .
- 15:20-15:50 Break
- 15:50-16:20 G. Blanchon blanchon@df.unipi.it
Unbound nuclei studied via transfer to the continuum reactions.
- 16:20-16:50 F. Skaza fskaza@cea.fr
Structure of 8He with direct reactions on a proton target.

Thursday March 11th

Chair: A. Dieperink

- 9:30-10:20 H. Emling h.emling@gsi.de
Single-particle structure of unstable nuclei - experimental prospects with high-energy secondary beams.
 - 10:20-11:00 J. Kolata James.J.Kolata.1@nd.edu
Breakup and Transfer in the ${}^6\text{He} + {}^{209}\text{Bi}$ System Near the Barrier.
 - 11:00-11:30 Coffee break
 - 11:30-12:20 E. Moya de Guerra imtem22@pinar2.csic.es
Spectroscopic factors from Fadeev calculations in ${}^3\text{He}$ and related topics.
 - 12:20-13:00 E. Vigezzi vigezzi@mi.infn.it
Effects of particle-vibration coupling in halo nuclei and around ${}^{68}\text{Ni}$.
 - 13:00-14:30 LUNCH
- Chair: E. Moya de Guerra*
- 14:30-15:20 Azaiez Faical azaiez@ipno.in2p3.fr
Study of monopole migration by measuring the strength of the n-p interaction with transfer reactions.
 - 15:20-15:50 M. Tomaselli marco@gsi.de
Halo study in exotic nuclei with $(e,e'p)$ and $(e,e'd)$ reactions.
 - 15:50-16:20 Break
 - 16:20-16:50 A. Y. Illarionov Alexei.Illarionov@pi.infn.it
Quasideuteron distribution in nuclei.
 - 20:00 Week II conference dinner.

Friday March 12th

Chair: C. Giusti

- 9:30-10:20 G. Orlandini orlandin@science.unitn.it
The ${}^4\text{He}(\text{e},\text{e}'\text{p}){}^3\text{H}$ reaction: a laboratory to understand the relevance and validity of spectroscopic factors.
 - 10:20-10:50 S.Shlomo shlomo@comp.tamu.edu
Comments on Hartree-Fock and random-phase-approximation calculations and self-consistency.
 - 10:50-11:20 V. Troncale Valentina.Troncale@cern.ch
Na and Mg n-deficient beam production for Nuclear Astrophysics and Collinear Laser Spectroscopy experiments at ISOLDE-CERN: theoretical outline and primary target study.
 - 11:20-11:50 Coffee break
 - 11:50-12:30 D.M. Brink thph0032@herald.ox.ac.uk
Summary talk
 - 12:30-14:00 LUNCH
- END of WORKSHOP