

just
Alex Brown visited RIKEN under the JUSTIPEN program
from Aug 16-18. The schedule included:

- 1) Discussions with Dr. Kohimura on his geometric model interpretation of total and reaction cross sections for scattering of nuclei from ^{12}C .
- 2) Discussions with Diasuke Abe on the use of Brown's Skyrme Hartree-Fock program DENS, and an introduction from Mr. Abe on his work on finite-range tensor interactions in nuclei.
- 3) Work by Prof. Brown on including the zero-range tensor interaction in his Skyrme Hartree-Fock and applications to fitting the tensor strengths to the nuclear data set used for Brown's SKX interaction.
- 4) Presentation of a seminar on "New Hamiltonians for the sd-shell". The abstract is given below.
- 5) Discussion with Prof. Susumu Shimoura and his student Shinichiro Michimasa on applications of the new USDA and USDB Hamiltonians to the interpretation of their recent data for ^{23}F . The results will be reported in a new paper by Prof. Brown and his student Angelo Signoracci.
- 6) Discussion with Prof. Motobayashi and his student Yasuhiro Togano on the interpretation of their new data on the inelastic scattering of the first excited state in ^{27}P in connection with the astrophysical rp-process.
- 7) Discussion with Dr. Ustuno and Prof. Taka Ostuka on the interpretation of results with the new sd-shell Hamiltonians for understanding the island of inversion.
- 8) Discussion with Prof. Otsuka, Prof. Suzuki and Otsuka's student Diasuke Abe on the interpretation of the results obtained for the strengths of the zero-range tensor interaction in the fits to nuclear data.
- 9) Discussed new experimental works with visiting Prof. W. Mittig.
- 10) Tour of the RIBF facility with Dr. Nori Aoi
- 11) Discussed future facilities with Ishihara

Suggested information for future guests

general

The "Tokyo City Atlas - a bilingual guide" (Kodansha) is a good detailed map that includes the RIKEN area

Visitors should have a map of RIKEN area with a highlight of buildings involved and instruction to give to Taxi driver at wako-shi to get to the office area.

It would be good to have a one page list of names

just
the RIKEN experimentalists and theorists and which
groups they belong to (plus space for the visitor to
add more names if needed).

Since most guests will arrive at Narita
around 4 pm and will be tired, it is reasonable
to stay at a hotel in Tokyo center for the first night.
The Villa Fontaine hotel near the Tokyo bus terminal
is fine. would also suggest to stay there on the last
night.

Lodging

no phone - can make calls from the office
need password for wireless
information cards are available in the room for
 how to adjust air conditioner
 how to turn on hot water heater in bathroom
 "life in RIKEN" booklet
opening hours of the cafeterias
the nearest restaurants outside RIKEN
washing machines are available

I was told that wireless in the lodging is not
available from 6 pm to 8 am - but this is the time
it is most needed.

Office

password for wireless
how to make international calls
useful local phone numbers
when the office building is open

Seminar title and abstract

"New Hamiltonians for the sd-shell".

I will discuss results for new Hamiltonians for the sd-shell nuclei.
Realistic wavefunctions are obtained that are able to describe observables
with a improved level of precision. Prospects for nuclear theory for the next
decade with the confrontation and convergence of various models will be discussed.

Prof. Brown first came to Japan in 1974 with a one year fellowship from
the Japan Society for the Promotion of Science to work with Prof. Arima
at the Univ. of Tokyo. Since then he has visited Japan many times and
has collaborated in research papers with over 100 Japanese researchers.
The newly funded Japan U.S. Institute for Physics with Exotic Nuclei (JUSTIPEN)
program will greatly expand the joint theoretical and experimental efforts
which are necessary for the understanding of the most exotic nuclei that
will be studied with current and next-generation facilities at RIKEN and
in the United States.