

JUSTIPEN EXIT REPORT

Hokudai-TORIJIN-JUSTIPEN-EFES Workshop
Onuma Park, Hokkaido, Japan

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July 20-25, 2008

I visited Japan under the JUSTIPEN support from 20 to 25 of July, 2008. There I attended the Hokkaido Workshop and I presented a talk with the title *Gamow Shell Model description of charge radii in halo nuclei*. The broad variety of subjects presented in this Workshop, covering the areas of both structure and reactions, gave me the opportunity to broad my knowledge horizons and learn about new methods that are applied in various areas of nuclear physics.

I had very constructive discussions with Prof.Ploszajczak, concerning the project that I am currently involved. In particular, we concluded that an important quantity in the correct description of the charge radius in ${}^6\text{He}$, is the occupation of the $p_{3/2}$ orbital. In our procedure for describing Halo nuclei within the Gamow Shell Model (GSM), we first used a Hamiltonian free from spurious Center of Mass motion, inspired by techniques that are used in the Cluster Orbital Shell Model (COSM). Due to this connection between GSM and COSM, I had very interesting and stimulating discussions with Prof.Kato and Dr.Masui.

I would like to thank the organizers for the opportunity they gave me to present my work, and also the Japanese hosts for the exceptional hospitality.