乞掲示

理化学研究所原子核グループコロキウム　*2001. 11. 29*

講師：　**Dr. S.M. Lukyanov**

(Flerov Laboratory of Nuclear Reactions, Joint Institute for Nuclear Research, Dubna, Russia)

題目：　FUSION ENHANCEMENT ABOVE THE BARRIER FOR THE ^{6}He + ^{209}Bi-REACTION

∗ The seminar will be given in *English.*

日時：　2001年 11月 29日 (Thu.)　16:00 –

場所：　RIKEN Main Bldg. 2F Seminar Room

Abstract

The experimentally measured excitation functions for the fission and 4n-evaporation channels are presented for the ^{6}He + ^{209}Bi-reaction. The secondary ^{6}He beam was produced using the standard beam-transport line of the U400M accelerator at FLNR, JINR. The comparison of the obtained experimental data with similar results for the ^{4}He + ^{209}Bi-reaction shows that in the case of the ^{6}He + ^{209}Bi-reaction a significant enhancement of the cross section is observed for energies above the barrier. In order to get an agreement between the experimental data and the theoretical calculations it is necessary to reduce the Coulomb barrier by 15-20%, which corresponds to an increase of the parameter ro of the nuclear potential up to 1.5-1.6 Fm. The future experiments are planned and described.

∗ Host researcher : H. Sakurai (Univ. of Tokyo/RIKEN)

セミナーを希望される方、セミナーのお知らせのemailによる配送またはその変更を希望される方は下記までご連絡下さい。

セミナー係

RIビーム科学研究室　福山 祥光　西 勇二　涌井 崇志

セミナー係連絡先

(email)　seminar@rarfaxp.riken.go.jp

(FAX)　048–462–4689

(WWW)　http://rarfaxp.riken.go.jp/~seminar/