Experiments on the study of deuteron-proton interaction at intermediate energy at Internal Target at Nuclotron

S.M. Piyadin[a], Yu.V. Gurchin[a], P.K. Kurilkin[a], A.Yu. Isupov[a], K. Itoh[c], M. Janek[a,d], J.T. Karachuk[a,e], T. Kawabata[b], A.N. Khrenov[a], A.S. Kiselev[a], V.A. Kizka[a], V.A. Krasnov[a], A.K. Kurilkin[a], V.P. Ladygin[a], N.B. Ladygina[a], A.N. Livanov[a], Y. Maeda[f], A.I. Malakhov[d], G. Martinska[a], S.G. Reznikov[a], S. Sakaguchi[b], H. Sakai[b,g], Y. Sasamoto[b], K. Sekiguchi[h], M.A. Shikhalev[a], K. Suda[h], T. Uesaka[b], T.A. Vasiliev[a], H. Witała[i]

[a] LHEP-JINR, Dubna, Moscow region, Russia
[b] Center for Nuclear Study, University of Tokyo, Tokyo, Japan
[c] Saitama University, Saitama, Japan
[d] P.J.Safarik University, Kosice, Slovakia
[e] Advanced Research Institute for Electrical Engineering, Bucharest, Romania
[f] Kyushu University, Japan
[g] Department of Physics, University of Tokyo
[h] Institute for Physical and Chemical Research (RIKEN), Saitama, Japan
[i] Jagiellonian University, Kraków, Poland

The experimental program on the study of deuteron-proton interaction at Internal Target at Nuclotron is discussed. Recent results on the deuteron vector and tensor analyzing powers in dp-elastic scattering obtained at intermediate energies are presented. The status of the DSS (Deuteron Spin Structure) setup upgrade is reported.

E-mail: piyadin@jinr.ru