

LXXII International conference "Nucleus-2022: Fundamental problems and applications"

Contribution ID: 230

Type: Oral talk (15 min + 5 min questions)

OPTICAL MODEL ANALYSIS OF PROTON ELASTIC SCATTERING ON ${}^6\text{Li}$ NUCLEI WITH RESONANCE CONTRIBUTION

Tuesday, 12 July 2022 17:10 (20 minutes)

Optical model analysis [1] of proton elastic scattering on ${}^6\text{Li}$ nuclei at proton energy from 50 keV to 185 MeV was continued with the use of the optical-model program code OptModel [2] taking into account the resonance contribution. Polarization data [3] in 1.21 to 3.22 MeV proton energy E_p range were added into set of the early used elastic scattering experimental data.

1. L.N. Generalov, V.A. Zherebtsov, S.M. Selyankina, Bull. Russ. Acad. Sci. Phys. 85. 1136 (2021).
2. L.N. Generalov, V.A. Zherebtsov, S.M. Taova, Bull. Russ. Acad. Sci. Phys. 80. 295 (2016).
3. C. Petitjean, L. Brown, R.C. Seyler, Nucl. Phys. A. 129. 209 (1969).

The speaker is a student or young scientist

Yes

Section

1. Experimental and theoretical studies of nuclear reactions

Primary authors: Mr GENERALOV, L. N. (Russian Federal Nuclear Center – All-Russian Research Institute of Experimental Physics); Mr ZHEREBTSOV, V. A. (Russian Federal Nuclear Center – All-Russian Research Institute of Experimental Physics); Ms SELYANKINA, S. M. (Russian Federal Nuclear Center – All-Russian Research Institute of Experimental Physics); Mr ZHEREBTSOV, V. A. (Russian Federal Nuclear Center – All-Russian Research Institute of Experimental Physics); Ms SELYANKINA, S. M. (Russian Federal Nuclear Center – All-Russian Research Institute of Experimental Physics)

Presenters: Ms SELYANKINA, S. M. (Russian Federal Nuclear Center – All-Russian Research Institute of Experimental Physics); Ms SELYANKINA, S. M. (Russian Federal Nuclear Center – All-Russian Research Institute of Experimental Physics)

Session Classification: Experimental and theoretical studies of nuclear reactions