

Photo- and Electro-production of Kaons

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The isobaric models for the photo- and electro-production of kaons on nucleons will be discussed in the energy region from the threshold up to 3 GeV. Reliable description of the process, especially at small kaon angles, is necessary for successful predictions of the cross sections for the kaon production on nuclei, e.g. the electro-production of hypernuclei [1].

The models for the elementary process will be used on the calculation of the cross sections for the photo-production of neutral kaons on deuteron [2]. The results will be compared with the recent experimental data [3] and some basic properties of the amplitude for the photo-production of neutral kaons on neutron will be shown.

[1] M. Iodice et al, Phys. Rev. Lett. 99 (2007) 052501.

P. Bydzovsky, M. Sotona, T. Motoba, K. Itonaga, K. Ogawa, and O. Hashimoto, arXiv:0706.3836 [nucl-th].

[2] P. Bydzovsky, M. Sotona, O. Hashimoto, and T. Takahashi, arXiv: nucl-th/0412035.

[3] K. Tsukada et al, Phys. Rev. C 78 (2008) 014001.