

CLAS Physics Data Base for the Physics Analysis of the Experiments with Electromagnetic Probes.

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CLAS Physics Data Base (CLAS DB) has been developed in collaboration between the SINP at MSU and the Hall B at Jefferson Lab [1,2]. CLAS DB contains most experimental results on inclusive semi-inclusive and exclusive reaction off proton and nuclei obtained with the CLAS detector. The substantial part of these experimental results represent the only available in the world data sets. The results stored in the CLAS DB are of particular importance for exploration of the structure of the ground and excited hadron states offering the insight into strong QCD dynamics which underlie their generation from quarks and gluons [3,4]. The status of CLAS DB and the opportunities to use the available information for the research in hadron physics will be presented in the talk. In particular, the web-interface and the build-in tools for the customer data search and for extraction of semi-inclusive and exclusive structure functions in electron scattering will be presented. The work in progress on the development of the web resources for interpolation and extrapolation of inclusive/exclusive electron scattering observables [5] will be discussed.

References

1. CLAS Physics Data Base <https://clas.sinp.msu.ru>
2. V.V. Chesnokov et al., *Memoirs of the Faculty of Physics* 3, 199403 (2019).
3. V.D. Burkert, *Ann Rev. Nucl. Part. Sci*, 68, 405 (2018).
4. V.I. Mokeev, *Few Body Syst.* 59, 46 (2018).
5. A.N. Hiller Blin et al., *Phys. Rev. C* 100, 035201 (2019).

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