Transfer of our published data to HEP DB: motivations

- Theorists/phenomenologists have been complaining of the difficulty of accessing published CLAS Collaboration data
- Journals and referees tend to request more and more a link to access the data
- Our data are in principle stored in the database mantained by MSU
- However:
  - Not everyone that published a CLAS paper has been including their data in the MSU DB: the Collaboration has not enforced the systematic submission on every lead author
  - The MSU DB is a « CLAS-only » feature, not very known outside of our collaboration
  - The majority of the hadron-physics and particle-physics collaborations use the HEP-DB:

A2 at MAMI, ALEPH, ALICE, ANKE experiment at COSY, ATLAS, BaBar, Belle, BESIII, BRAHMS, CBELSA/TAPS, CMS, COMPASS, Geant4, GlueX, HADES, HERA, IPPP, LHCb, LHCf, MEG, MicroBooNE, MiniBooNE, MoEDAL, NA61/SHINE, NA62, PHENIX, PIENU, Snowmass pMSSM, STAR, STEREO, STRONG-2020, TOTEM, USQCD / Fermilab Lattice and MILC collaborations

Surprisingly, there are also already some CLAS data (!)

HEP DB: an example from GlueX

Hide Publication Information

Measurement of spin density matrix elements in Λ(1520) photoproduction at 8.2–8.8 GeV

The GlueX collaboration

Adhikari, S. , Akondi, C.S. , Albrecht, M. , Ali, A. , Amaryan, M. , Asaturyan, A. , Austregesilo, A. , Baldwin, Z. , Barbosa, F. , Barlow, J.

Phys.Rev.C 105 (2022) 035201, 2022.

https://doi.org/10.17182/hepdata.132920

Journal | INSPIRE

Abstract (data abstract)

"Results and supplementary material for Measurement of spin density matrix elements in Λ(1520) photoproduction at 8.2-8.8 GeV"

Download All

Filter 10 data tables

SDME results

Data from Table II of preprint

10.17182/hepdata.132920.v1/t1

Numerical results for all presented SDMEs. The first uncertainty is statistical, the second systematic

Naturality results

Data from Table II of preprint

10.17182/hepdata.132920.v1/t2

Numerical results for all presented natural and unnatural combinations, and covariances between ρ^1_{11} and ρ^1_{33}. The first uncertainty is statistical,...

Markov Chain Bin 1

10.17182/hepdata.132920.v1/t3

This table contains thinned out samples of the Markov chains used in the parameter estimation of the SDME measurements for...

SDME results

10.17182/hepdata.132920.v1/t1

https://www.hepdata.net/re | JSON

Data from Table II of preprint

Numerical results for all presented SDMEs. The first uncertainty is statistical, the second systematic

cmenergies: 4.22

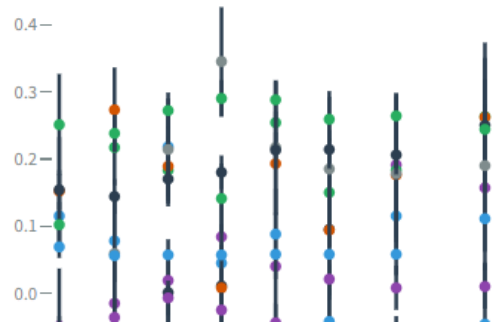
observables: POL.RHO

phrases: Exclusive, Polarization, SDME, Photoproduction

reactions: GAMMA P --> LAMBDA(1520) K+

SQRTS(S)	4.22 GeV					
RE	GAMMA P --> LAMBDA(1520) K+					
$-(t-t_{min})$ [GeV**2/c**2]	$-(t-t_{min})_{RMS}$	ρ^0_{11}	ρ^0_{31}	ρ^0_{3-1}	ρ^1_{11}	ρ^1_{33}
0.197	0.069	0.102 ±0.025 stat ±0.022	-0.125 ±0.016 stat ±0.022	0.154 ±0.018 stat ±0.022	-0.123 ±0.087 stat ±0.013	0.15 ±0.0 sta ±0.0

Visualize



Transfer of our published data to HEP DB: howto

“Submissions are handled by Coordinators for an experiment or a physics group within an experiment. These Coordinators assign an Uploader and a Reviewer to each submission after clicking the "Submit" button when they are logged in.

An email is sent to the designated Uploader with a link which gives the privileges to upload a data submission. Once the Uploader thinks their submission is ready for review, they should click the "Notify Participants" button. An email is then sent to the designated Reviewer with a link which assigns the appropriate privileges. The Reviewer needs to mark each table as having "Passed" review before clicking the "Notify Coordinator" button. The Coordinator can then "Finalise" the submission from their Dashboard if an INSPIRE record for the publication has been attached. The entire submission will then be published and made searchable in HEPData. All current submissions are available for a Coordinator, Reviewer, or Uploader to see in their Dashboard.

See also Section 6 of arXiv:1704.05473 for an overview of the submission process

Transfer of our published data to HEP DB: in practice

- Nothing currently in the CLAS Charter and By-laws regulates this matter
- The CCC is in favor of uploading our published data on the HEP DB
- The requirement to upload data for public access should be integrated in the paper-review process, and this should be formalized in the By-laws. The CCC will work on this.
- Should we move all our data (old and recent)? The CCC thinks we should move for sure the 12-GeV ones, plus the most relevant 6-GeV ones. We can have links in the two DBs to each other.
- In practice, the CLAS Chair can be the « Coordinator » at HEP-DB (I have already signed up for this role); the lead/corresponding author of the paper can be the « Uploader »; the chair of the Ad Hoc committee, or another AH committee member, can be the « Reviewer » at HEP-DB.
- We can start with the soon-to-be-released pDVCS CLAS12 paper as a first test
- We need to decide how to handle the transfer of the already published data: setup a dedicated committee? We will need the help from our MSU colleagues, for the data which are on the MSU DB. This could count as Service Work for the Collaboration, of course
- **Comments/suggestions?**