

Abstract Submitted
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Hadron Analyses Data Repository Online Project MICHAEL PENNINGTON, Jefferson Laboratory — The study of excited states of the nucleon is a major effort of present day nuclear physics. The spectrum reflects the internal dynamics of QCD. The past decade has seen a dramatic increase in the precision and range of experimental measurements from MAMI@Mainz and CEBAF@JLab. The analyses of these data, both in Europe and the US, have reached a level of robustness and sophistication that the results on the production of N^* 's demand to be shared openly in the nuclear reaction community and beyond. Indeed, there is a demand for such information in fields beyond hadron spectroscopy, such as Heavy Ion collisions. Reaction calculations demand amplitudes and not just simple representations in terms of resonances. The aim of this project is to set up a publicly accessible database to archive (a) the full range of data on cross-sections and polarization asymmetries measured in hadro and photo-production of baryon resonances, (b) for each excited baryon its mass, width, couplings and transition formfactors, (c) for each analysis, the partial wave amplitudes with a detailed exposition of the methods used, (e) where appropriate these will be compared with the detailed predictions of QCD.

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