

1. Record Nr.	UNINA9910458279503321
Titolo	NSTAR 2005 [[electronic resource]] : proceedings of the Workshop on the Physics of Excited Nucleons : Florida State University, Tallahassee, USA, 12-15 October 2005 / / editors, Simon Capstick, Volker Crede, Paul Eugenio
Pubbl/distr/stampa	Singapore ; ; Hackensack, N.J., : World Scientific, c2006
ISBN	1-281-37302-8 9786611373023 981-277-333-9
Descrizione fisica	xv, 430 p. : ill
Altri autori (Persone)	CapstickSimon <1958-> CredeVolker EugenioPaul Michael <1966->
Disciplina	539.7212
Soggetti	Hadrons Particles (Nuclear physics) Baryons Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Foreword -- Organization -- Plenary talks -- Focus session on coupled-channel analysis. Models for extracting N* parameters from Meson-Baryon reactions / T.-S. H. Lee. MAID analysis techniques / L. Tiator. Meson production on the nucleon in the Giessen K-matrix approach / H. Lenske. The importance of inelastic channels in eliminating continuum ambiguities in pion-nucleon partial wave analyses / A. Svarc. Phenomenological analysis of the CLAS data on double-charged pion photo- and electroproduction off protons / V. I. Mokeev. Gauge-invariant approach to meson photoproduction including the final-state interaction / H. Haberzettl -- Session on pentaquarks and exotics, recent experimental results, GDH sum rule. The status of pentaquark baryons / V. D. Burkert. Recent BES results from J/[symbol] decays / Z. Guo for the BES collaboration. Results from the GDH experiment at Mainz and Bonn / A. Braghieri. The strangeness

physics program at CLAS / D. Carman for the CLAS collaboration. Recent results from the Crystal Barrel Experiment at ELSA / U. Thoma. K^0 and K^* photoproduction in a coupled channels framework / O. Scholten. Cascade physics: a new window on Baryon Spectroscopy / J. Price -- Focus session on polarization. Polarization observables in the photoproduction of two pseudoscalar mesons / W. Roberts. The polarisation programme at ELSA / H. Schmieden. Experiments with frozen-spin target and polarized photon beams at CLAS / F. Klein. The crystal ball at MAMI / D. Watts. The GRAAL collaboration: results and prospects / C. Schaerf. CLAS: double-pion beam asymmetry / S. Strauch -- Focus session on developments in theoretical description of baryon spectrum, including lattice QCD and coupled-channel unitarised chiral models. Dynamically generated baryon resonances / M. Lutz. Describing the baryon spectrum with $1/N$ QCD / R. Lebed. Towards a determination of the spectrum of QCD using a space-time lattice / C. Morningstar. Dynamical generation of $J^P = 1/2^+$ resonances and the $\Lambda(1520)$ resonance / S. Sarkar -- Parallel talks. Parallel session P1-A. Coupled-channel fit to ΛN elastic and Λ production data / W. Briscoe. The Carnegie-Mellon University program for studying baryon resonance photoproduction using partial wave analysis / M. Williams. Multichannel partial-wave analysis of KN scattering / H. Y. Zhang. Helicity amplitudes and electromagnetic decays of strange baryon resonances / T. Van Cauteren. Progress report for a new Karlsruhe-Helsinki type pion-nucleon partial wave analysis / S. Watson. Baryon excitation through Meson Hadro- and photoproduction in a coupled-channels framework: chiral-symmetry-inspired model / A. Waluyo. Parallel session P1-B. Double-polarization observables in pion-photoproduction from polarized HD at LEGS / A. Sandorfi. Electroexcitation of the $P(1440)$, $D(1520)$, $S(1535)$, and $F(1680)$ up to 4 (GeV/c) from CLAS data / I. G. Aznauryan. A genetic algorithm analysis of N^* resonances / D. G. Ireland. Measurement of the $N(1232)$ transition at high momentum transfer by Λ electroproduction / M. Ungaro. Measurement of cross section and electron asymmetry of the $p(\Lambda)n$ reaction in the $\Lambda(1232)$ and higher resonances for $Q^2 \leq 4.9$ (GeV/c) 2 / K. Park. Pion-nucleon charge exchange in the $N^*(1440)$ resonance region / M. Sadler. Parallel session p1-C. Nucleon resonance decay by the K^* channel / R. Castelijns. Coupled channel study of K^* photoproduction / T.-S.H. Lee. Measurements of C_1 , C_2 for K^* and K photoproduction / R. Bradford. Photoproduction of K^* and $K(1385)$ in the reaction γp at Jefferson Lab / L. Guo. K^* photoproduction off the proton at CLAS / I. Hleiqawi. Inclusive Λ photoproduction on the neutron via the reaction $\gamma n \rightarrow \Lambda p$ / J. Langheinrich. Parallel session P2-A. $S = 0$ pseudoscalar meson photoproduction from the proton / M. Dugger. Photoproduction of neutral pion pairs off the proton with the crystal barrel detector at ELSA / M. Fuchs. Analyzing Λ photoproduction data on the proton at energies of 1.5-2.3 GeV / K. Nakayama. Eta photoproduction off the neutron at GRAAL / V. Kuznetsov. Λ photoproduction off deuterium / I. Jaegle. Λ and Λ photoproduction on the neutron / P. Nadel-Turonski. Parallel session P2-B. The problem of exotic states: view from complex angular momenta / Ya. Azimov. Search for Λ at CLAS in γp / N. A. Baltzell. $\Lambda(1189)$ photoproduction off the proton / M. Nanova. Photo-excitation of hyperons and exotic baryons in γp / Y. Oh. On the nature of the $\Lambda(1405)$ as a

superposition of two states / E. Oset. Channel coupling effects in photo-induced π -N production / O. Scholten. Parallel session P2-C. The influence of inelastic channels upon the pole structure of partial waves in the coupled channel pion-nucleon partial wave analysis / S. Ceci. The importance of π process for the pole structure of the P11 partial wave T-matrix in the coupled-channel pion-nucleon partial wave analysis / B. Zauner. π spectroscopy in photoproduction on a proton target at Jefferson Lab / L. Guo. Structure of the π -Meson and diamagnetism of the nucleon / M. Schumacher. Excited baryons in the $1/N$ expansion / N. Matagne. Surprises in 2π production by π and K at intermediate energies / B. M. K. Nefkens -- Brag meeting. Summary of the Baryon Resonance Analysis Group Meeting / S. Capstick. Program of the Workshop. List of participants.

Sommario/riassunto

Brings together experts on the quark-gluon structure of matter as it applies to nucleon resonance physics. This book contains contributions that discuss the findings in areas such as meson production via electromagnetic and hadronic reactions, baryon resonance structure in chiral and lattice QCD approaches, and more.
