167 A.P. Szczepaniak
A possible interpretation of the $\pi_1(1400)$ exotic meson

171 E. Doroshkevich et al.
Study of baryon and search for dibaryon resonances
by the $pp \rightarrow pp\pi^+\pi^-$ reaction

177 J. Ritman
Antiproton physics at GSI: Studying the physics
of hadronic matter

181 T. Reichelt et al.
The Jefferson Laboratory E93-038 Collaboration
Measurement of the neutron electric form factor via
recoil polarimetry

185 C. García-Recio et al.
$S = -1$ meson-baryon scattering in coupled-channel
unitarized Chiral Perturbation Theory

189 B. Metsch et al.
The spectrum and strong decays of baryons in a
relativistic quark model

193 D. Merten et al.
Electromagnetic properties of baryons in a relativistic
quark model

197 F.P. Sassen et al.
t-dependence of pion production in $\pi^-p \rightarrow \pi^0\pi^0n$
201 D.O. Riska
   Nuclear forces and currents in large-$N_c$ QCD

207 V.Yu. Grishina et al.
   Polarization observables in high-energy deuteron
   photo-disintegration within the Quark-Gluon Strings
   Model

211 C.G. Strouthos
   Phase diagram of the three-dimensional NJL model

215 A.E. Dorokhov and I.O. Cherednikov
   Nonperturbative contribution to the quark form factor
   within the instanton model

219 S. Leupold
   Determination of vector meson properties by matching
   resonance saturation to a constituent quark model

223 G. Martens et al.
   Chromofields of strings and baryons

227 B.R. Holstein
   Effective effective interactions

231 P. Maris et al.
   Facets of confinement and dynamical chiral symmetry
   breaking

237 H. Merkel
   Experimental tests of Chiral Perturbation Theory

241 A.W. Thomas et al.
   Recent developments in quark nuclear physics

247 D.B. Leinweber et al.
   FLIC fermions and hadron phenomenology

253 K. Jansen
   Lattice calculations

257 C. Michael
   Beyond the quark model of hadrons from lattice QCD

261 R. Alkofer et al.
   Infrared exponents and the running coupling of Landau
   gauge QCD and their relation to confinement

265 F. Frömel et al.
   Spectral functions of quarks in quark matter

269 W. Detmold et al.
   Moments of isovector quark distributions in lattice QCD

273 A.R. Dzierba
   Mapping gluonic excitations and confinement
   The GlueX/Hall D project at Jefferson Lab

277 T. Johansson
   Meson production at CELSIUS
T. Nagae
Progress in hypernuclear physics

V.R. Brown et al.
Parity non-conservation in proton-proton elastic scattering

K. Hatanaka et al.
pd scattering at 250 MeV and three-nucleon forces

E. Doroshkevich et al.
Experiments on the search for the NN-decoupled NNπ-resonance \( d' \)

I.R. Afan and A.D. Lahiff
The Bethe-Salpeter equation and the Low Energy Theorems for \( \pi N \) scattering

A.M. Gasparian et al.
Exclusive and semi-inclusive strangeness and charm production in \( \pi N \) and NN reactions

T.S. Belozerova and V.K. Henner
Coupled-channel analysis of isoscalar \( f_0 \)-mesons in NN annihilation and \( \pi \pi \) scattering

A.Yu. Illarionov et al.
Probing the deuteron structure at small N-N distances by cumulative pion production

Yu.N. Uzikov et al.
Short-range NN properties in the processes \( pd \to dp \) and \( pd \to (pp)n \)

I. Schulzhenkov et al.
Charge “asymmetry” from the isospin symmetry in \( pp \to pp\pi^+\pi^- \)

W. Oelert
Hadronic threshold reactions

S.D. Bass
Manifestations of anomalous glue: Light-mass exotic mesons and \( g''_{\pi NN} \)

I. Fröhlich et al.
Exclusive \( \eta \) production in pp reactions

P. Moskal et al.
Eta physics at threshold

P. Fedorets and V. Kleber
Investigation of the \( a_0^+(980) \)-resonance with ANKE

E. Oset et al.
Chiral dynamics in the \( pp \to dK^+\bar{R^0} \) and \( pp \to d\pi^+\eta \) reactions

W. Schroeder
Hyperon production in proton-proton collisions at the time-of-flight spectrometer COSY-TOF

P. Kowina et al.
Associated strangeness production at threshold

P. Winter et al.
First close-to-threshold measurement of the analysing power \( A_y \) in the reaction \( pp \to pp\eta \)

C. Hanhart
Aspects of \( a_0^0-f_0 \) mixing in the reaction \( pn \to dX \)

H. Toki et al.
Surface pion condensation in finite nuclei

S. Abdel-Samad et al.
Study of \( p+d \to ^3\Lambda +\pi \) reactions in the \( \Delta \)-resonance region
### Soft and Hard Electroweak Processes

371 R.A. Schumacher  
Strangeness production and other recent results from Hall B at Jefferson Lab

377 G. van der Steenhoven  
The (spin) structure of the nucleon

383 B. Foster  
HERA results on the structure of the proton

389 M. Garçon  
An introduction to the Generalized Parton Distributions

395 J.-C. Peng  
Flavor structure of the nucleon sea

401 P. Pedroni  
Helicity dependence of the $\gamma N$ interaction and the GDH sum rule

405 S. Schadmand  
Photon-induced reactions

409 F. Ronchetti  
Deuteron photodisintegration at high energy

413 H. Xiang  
Measurement of $\pi^-$ and $\pi^+$ photoproduction in deuterium at large momentum transfer for $E = 1.7$–$5.6$ GeV

417 J.G. Messchendorp  
$\pi \pi$ correlations in $\gamma + A$ reactions

### Medium Modifications of Hadrons

421 S. Schneider et al.  
$\eta N$ final-state interaction in incoherent photoproduction of $\eta$-mesons from the deuteron

425 J.W. Martin  
Prospects for measurements of parity-violating photoproduction of $\pi^\pm$

429 M. Vanderhaeghen  
Generalized parton distributions

433 S.M. Eliseev  
Deep inelastic scattering of leptons on nuclei: Hadron formation, cumulative particles production

437 I.P. Ivanov et al.  
High-density QCD and saturation of nuclear partons

441 J. Stewart  
Measurement of the polarized parton distribution functions at HERMES

445 A. Siczurek and J. Speth  
Perturbative versus nonperturbative effects at medium energies in the $\gamma \gamma \to \pi^+\pi^-$ reaction

449 A.I. Signal and F.G. Cao  
Parton symmetries and the NuTeV anomaly

459 R. Rapp  
Hadrons in hot and dense matter
463 M. Ericson and G. Chanyay
Scalar and pseudoscalar QCD susceptibilities in nuclei

507 A. Wirzba et al.
In-medium chiral perturbation theory

467 W. Cassing
Transport analysis of in-medium hadron effects in pA and AA collisions

511 G. Krein
Chiral-symmetry restoration in clustered hadronic matter

471 M. Beyer
Few-body correlations in the QCD phase diagram

515 B.V. Jacak
Exploring superdense matter at RHIC

475 A. Sibirtsev
Hadrons with charmed quarks in matter

521 J.P. Wessels
Electron-positron pairs as a probe for hadrons in dense matter

479 M.J. Vicente Vacas
Experimental signals of η-mesons in nuclei and chiral symmetry

527 A.H. Mueller
Saturation in small-x and heavy-ion physics

483 E.F. Lütz et al.
Naturalness of nonlinear σ, ω self-couplings in relativistic mean-field models for neutron stars

531 T. Barnes
Charmonium cross-sections and the QGP

487 Ulf-G. Meißner
Some recent results in baryon chiral perturbation theory

537 Z. Rudy et al.
Properties of hot residual nuclei produced in pA reactions

491 A. Rusetsky
Including virtual photons in strong interactions

541 M. Ježabek
Heavy-quark physics
Recent developments and old problems

495 B. Moussallam
Electromagnetic corrections in the anomaly sector and the π° lifetime

543 Ulf-G. Meißner and S. Gacher
Chiral dynamics and B → 3π decay

499 E. Epelbaum et al.
Quark mass dependence of the nuclear forces

503 V. Bernard et al.
Moments of polarized parton distribution functions
547 D. Blaschke et al.  
Mott effect and J/ψ dissociation at the quark-hadron phase transition

551 P. Urban  
Gluonic penguin contribution to B → ππ decays

555 H. Rohdeß et al.  
Cross-sections and spin observables in proton-proton elastic scattering: Results from EDDA at COSY

559 H. Weigel  
Flavor symmetry breaking and strangeness in the nucleon

563 K.K. Seth  
Experimental review of charmonium spectroscopy

567 R.G. Milner  
Summary talk

Editorial

The Publishing Policy of the European Physical Journal A