

DESY-BERICHTE 1972

DESY 72/1	<u>Vector Meson Dominance, Photo- and Electro-production from Nucleons.</u> D. SCHILDKNECHT (Jan., 80 p.)	DESY 72/17	<u>On the Possibility of Measuring BEBC Pictures with an HPD.</u> F. SELONKE, Physikalisches Institut der Universität Bonn, R. WURTH, II. Institut für Experimentalphysik der Universität Hamburg, H. H. BROCKMANN, DESY (Apr., 17 p.)
DESY 72/2	<u>A Simple Method for Measurement and Regulation of the Memory Time in Streamer Chambers.</u> V. ECKARDT and H.-J. GEBAUER (Feb., 13 p.)	DESY 72/18	<u>Electromagnetic Form Factors of the Neutron at Squared Four-Momentum Transfers of 1.0 and 1.5 (GeV/c)<sup>2</sup>.</u> W. BARTEL, F.-W. BÜSSER, W.-R. DIX, R. FELST, D. HARMS, H. KREHBIEL, P. E. KUHLMANN, J. MCELROY, J. MEYER, and G. WEBER, DESY and II. Institut für Experimentalphysik der Universität Hamburg (Apr., 13 p.)
DESY 72/3	<u>Quark Loop Dynamics and Meson Decays.</u> H. SUURA, DESY, BING-LIN YOUNG, Department of Physics, Iowa State University, Ames, Iowa 50010, USA (Feb., 30 p.)	DESY 72/19	<u>Symmetries and the <math>K_S \rightarrow \mu^+ \mu^-</math> Branching Ratio.</u> G. V. DASS, DESY (Apr., 28 p.)
DESY 72/4	<u>Vector Meson Dominance and Smoothness of Invariant Amplitudes in <math>\pi\Delta(1236)</math> Electro-production.</u> A. BARTL, Institut für Physik der Universität Mainz and W. MAJEROTTO, D. SCHILDKNECHT, DESY, (Feb., 34 p.)	DESY 72/20	<u>Currents, Stress Tensor and Generalized Unitarity in Conformal Invariant Quantum Field Theory.</u> G. MACK, Institut für Theoretische Physik der Universität Bern, K. SYMANZIK, DESY (Apr., 53 p.)
DESY 72/5	<u>Elektroproductionsexperimente in der Hochenergiephysik.</u> K. HEINLOTH (Feb., 95 p.)	DESY 72/21	<u>Testing Triplet Models.</u> H. SUURA, DESY, T. F. WALSH, II. Institut für Theoretische Physik der Universität Hamburg BING-LIN YOUNG, Department of Physics, Iowa State University, Ames, Iowa 50010, USA, (May, 10 p.)
DESY 72/6	<u>On Calculations in Conformal Invariant Field Theories.</u> K. SYMANZIK (Feb., 11 p.)	DESY 72/22	<u>Photon Induced Nuclear Reactions Above 1 GeV I. Experimental.</u> G. ANDERSSON, I. BLOMQVIST, B. FORKMAN, G. G. JONSSON, A. JÄRUND, I. KROON, K. LINDGREN, B. SCHRÖDER, Department of Nuclear Physics, Lund Institute of Technology, Professorsgatan 3, S-223 63 LUND, Sweden, K. TESCH, DESY (May, 53 p.)
DESY 72/7	<u>Self-Trapping Field of Quarks in Hadrons.</u> H. SUURA (Feb., 9 p.)	DESY 72/23	<u>A Diffraction-Dissociation Model for High-Energy Electroproduction.</u> G. KRAMER, II. Institut für Theoretische Physik der Universität Hamburg, H. R. QUINN, DESY (May, 53 p.)
DESY 72/8	<u>Second-Order Effects in Chiral-Invariant Pion Lagrangians and the Use of Superpropagators.</u> H. LEHMANN, H. TRUTE, II. Institut für Theoretische Physik der Universität Hamburg (Feb., 19 p.)	DESY 72/24	<u><math>\pi^0</math> Electroproduction at the First Resonance at Momentum Transfers <math>q^2 = 0.6, 1,</math> and <math>1.56 \text{ GeV}^2</math>.</u> J. C. ALDER, F. W. BRASSE, E. CHAZELAS, W. FEHRENBACH, W. FLAUGER, K. H. FRANK, E. GANSSAUZE, J. GAYLER, V. KORBEL, J. MAY, M. MERKWITHZ, DESY, A. COURAU, G. TRISTRAM, J. VALENTIN, Laboratoire de Physique Atomique et Moléculaire du Collège de France, Paris (May, 34 p.)
DESY 72/9	<u>Pionization in pp Interactions at 12 and 24 GeV/c.</u> H. J. MÜCK, M. SCHACHTER, F. SELONKE, B. WESSEL, University of Bonn, V. BLOBEL, A. BRANDT, G. DREWS, H. FESEFELDT, B. HELLMIG, D. MÖNKE-MEYER, P. SÖDING, DESY and University of Hamburg, G. W. BRANDENBURG, H. FRANZ, P. FREUND, D. LÜERS, W. RICHTER, W. SCHRANKEL, Max-Planck-Institut für Physik und Astrophysik, München (Feb., 9 p.)	DESY 72/25	<u>Theoretical Estimate of the Meson Nucleon Sigma Terms.</u> B. RENNER, II. Institut für Theoretische Physik, Universität Hamburg (May, 6 p.)
DESY 72/10	<u>Bounds on Deep Inelastic Structure Functions.</u> S. PALLUA, B. RENNER, II. Institut für Theoretische Physik der Universität Hamburg (Mar., 21 p.)	DESY 72/26	<u>Recoil Polarization in <math>K^+\Lambda</math> Photoproduction at 5 GeV.</u> G. VOGEL, H. BURFEINDT, G. BUSCHHORN, P. HEIDE, U. KÖTZ, K.-H. MESS, P. SCHMÜSER, B. SONNE, B. H. WIIK, DESY and II. Institut für Experimentalphysik der Universität Hamburg (Jun., 14 p.)
DESY 72/11	<u>The Mesons as a Relativistic Fermi-Quark - Anti-quark System with Strong Binding.</u> M. BÖHM, Physikalisches Institut der Universität, Würzburg, H. JOOS, M. KRAMMER, DESY (Mar., 46 p.)	DESY 72/27	<u>Photon Induced Nuclear Reactions Above 1 GeV. II. Spallation Reactions.</u> K. LINDGREN, G. G. JONSSON, Department of Nuclear Physics, Lund Institute of Technology, Professorsgatan 3, S-223 63 LUND, Sweden (Jun., 22 p.)
DESY 72/12	<u>Experimental Determination of Functions.</u> S. YELLIN (Mar., 38 p.)		
DESY 72/13	<u>Hardware Logic for the Selection and Analysis of Events Observed in Charpak-Chamber and Counter Experiments.</u> E. TAROCCHI, LNF, Frascati (Roma), P. Waloschek, DESY (Mar., 28 p.)		
DESY 72/14	<u>A Kerr Camera with Ten Picoseconds Time Resolution.</u> R. FISCHER, R. ROSSMANITH (Mar., 8 p.)		
DESY 72/15	<u>A Comparison Between the Bilocal Algebra on the Light Cone and the Parton Model.</u> M. CHAINCHIAN, II. Institut für Theoretische Physik der Universität Hamburg (Mar., 9 p.)		
DESY 72/16	<u>On the Movement of Bubbles in a Medium-Sized Bubble Chamber.</u> G. HARIGEL, CERN, Geneva, G. HORLITZ, S. WOLFF, DESY (Mar., 66 p.)		

- DESY 72/28 Photon Induced Nuclear Reactions Above 1 GeV.  
III. Fission in Gold and Lead.  
I. KROON, B. FORKMAN, Department of Nuclear Physics, Lwod Institute of Technology and Department of Physics, University of Lund, Professorsgatan 3, S-223 63 LUND, Sweden (Jun., 15 p.)
- DESY 72/29 Photon Induced Nuclear Reactions Above 1 GeV.  
IV. Mass Distribution in the 6.00 GeV Bremsstrahlung Induced Fission of Natural Uranium.  
B. SCHRODER, Department of Physics, University of Lund, Professorsgatan 3, S-223 63 LUND, Sweden (Jun., 22 p.)
- DESY 72/30 The  $k^2$ -Dependence of the Transverse Pion Electroproduction Cross Section in a Generalized Born Term Model.  
F. GUTBROD, DESY, G. KRAMER, II. Institut für Theoretische Physik der Universität Hamburg (Jun., 22 p.)
- DESY 72/31 Measurements of Inclusive Hadron Momentum Distributions in Deep Inelastic Electro-production.  
J. C. ALDER, F. W. BRASSE, E. CHAZELAS, W. FEHRNACH, W. FLAUGER, K. H. FRANK, E. GANSSAU, J. GAYLER, V. KORBEL, W. KRECHLOK, J. MAY, M. MERKWTZ, P. D. ZIMMERMANN (Jun., 25 p.)
- DESY 72/32 Quark Model Predictions for Weak Production of Pseudoscalar Mesons.  
G. KÖPP, D. REIN, III. Physikalisches Institut der Technischen Hochschule Aachen, P. ZERWAS, DESY (Jun., 9 p.)
- DESY 72/33 Chiral Invariance and Effective Range Expansion for Pion-Pion Scattering.  
H. LEHMANN, II. Institut für Theoretische Physik der Universität Hamburg (Jun., 8 p.)
- DESY 72/34 Photon-Hadron Interactions (Experimental)  
H. MEYER (Jun., 48 p.)
- DESY 72/35 Anomalous Dimensions in p-p Elastic Scattering?  
W. R. THEIS (Jul., 11 p.)
- DESY 72/36 Polarization Effects in Deep Inelastic Lepton-Nucleon Scattering.  
T. F. WALSH, II. Institut für Theoretische Physik der Universität Hamburg, P. ZERWAS DESY (Apr., 40 p.)
- DESY 72/37 The Reaction  $\pi^+ p \rightarrow \omega\Delta^{++}(1236)$  at 11.7 GeV/c.  
D. EVANS, R. O. MADDOCK, G. F. PINTER, Department of Physics, the University, Durham, R. CONTRI, U. TREVISON, Istituto di Fisica e Sezione INFN, Genova, H. NAGEL, W. D. SCHLATTER, Universität Hamburg, II. Institut für Experimentalphysik and DESY, G. CECCHET, G. COSTA, M. ENRIOTTI, Istituto di Fisica e Sezione INFN, Milano, A. DAUDIN, M. L. FACCINI, M. A. JABIOL, Departement de Physique des Particules élémentaires, CEN-Saclay (Jul., 25 p.)
- DESY 72/38 Separation of  $\sigma_s$  and  $\sigma_t$  at  $q^2 \sim 1(\text{GeV}/c)^2$  in the Resonance Region.  
J. C. ALDER, F. W. BRASSE, E. CHAZELAS, W. FEHRNACH, W. FLAUGER, K. H. FRANK, E. GANSSAU, J. GAYLER, W. KRECHLOK, V. KORBEL, J. MAY, M. MERKWTZ, P. D. ZIMMERMAN, (Jul., 11 p.)
- DESY 72/39 Electron-Positron Annihilation into Hadrons at High Energies.  
HUNG CHENG, Department of Mathematics, Massachusetts Institute of Technology, Cambridge, Massachusetts 02139, USA, TAI TSUN WU, Gordon McKay Laboratory, Harvard University, Cambridge, Mass. 02138, USA and DESY (Jul., 16 p.)
- DESY 72/40 Limiting Distributions for Inclusive Charged Pion Production at Very High Energy.  
H. MEYER, DESY, W. STRUCZINSKI, III. Institut für Experimentalphysik B der Rheinisch-Westfälischen Technischen Hochschule Aachen, (Jul., 8 p.)
- DESY 72/41 Estimation of the Vacuum SU<sub>3</sub> Breaking in the (3,3) + (3,3) Model.  
D. T. CORNWELL, II. Institut für Theoretische Physik der Universität Hamburg, D. EIMERL, DESY (Jul., 20 p.)
- DESY 72/42 "Exotic" Hadron Weak Currents.  
R. J. OAKES, Department of Physics, Northwestern University, Evanston, Illinois 60201, USA and DESY, H. PRIMAKOFF, Department of Physics, University of Pennsylvania, Philadelphia, Penn. 19104, USA (Jul., 6 p.)
- DESY 72/43 Proton Polarization in Alcohols at 50 KG, 1°K.  
G. HARTMANN, D. HUBERT, S. MANGO, C. C. MOREHOUSE, K. PLOG (Aug., 13 p.)
- DESY 72/44 Pion Electroproduction and Photoproduction Including PCAC.  
NORMAN DOMBEY, University of Sussex, Brighton, England, B. J. READ, DESY, (Aug., 41 p.)
- DESY 72/45 High-Energy Reactions Seen from the s Channel: A Complex Pole in the Impact Parameter Plane.  
B. SCHREMPP, F. SCHREMPP, II. Institut für Theoretische Physik der Universität Hamburg (Aug., 40 p.)
- DESY 72/46 Quasi Two Body e<sup>+</sup>e<sup>-</sup> Annihilation.  
G. KRAMER, T. F. WALSH, II. Institut für Theoretische Physik der Universität Hamburg, (Aug., 45 p.)
- DESY 72/47 Long Range Potential Model of Hadrons.  
H. SUURA (Aug., 12 p.)
- DESY 72/48 Symmetry Principles and Constraints on Deep Inelastic Structure Functions.  
M. CHAICHIAN, S. PALLUA, II. Institut für Theoretische Physik der Universität Hamburg (Aug., 37 p.)
- DESY 72/49 Measurement of the Bunch Structure in the DESY Synchrotron.  
R. FISCHER, R. ROSSMANITH (Aug., 10 p.)
- DESY 72/50 Application of Duality Principles to Deep Inelastic Reactions.  
M. CHAICHIAN, S. KITAKADO, S. PALLUA, B. RENNER, II. Institut für Theoretische Physik der Universität Hamburg, J. DE AZCARRAGA, Departamento de Fisica Teórica and GIFT, Facultad de Ciencias, Barcelona-14, Spain (Sep., 24 p.)
- DESY 72/51 Single Photoproduction of Neutral  $\pi$  Mesons on Deuterium in the Forward Direction at 4 GeV.  
W. BRAUNSCHWEIG, H. DINTER, W. ERLEWEIN, H. FRESE, K. LÜBELSMAYER, H. MEYER-WACHSMUTH, C. C. MOREHOUSE, D. SCHMITZ, A. SCHULTZ von DRATZIG, G. WESSELS, I. Physikalisches Institut der Universität Bonn and DESY (Sep., 19 p.)

DESY 72/52	<u>Single Photoproduction of Neutral <math>\pi</math> Mesons on Hydrogen in the Forward Direction at 4 GeV.</u> W. BRAUNSCHWEIG, W. ERLEWEIN, H. FRESE, K. LÜBELSMAYER, H. MEYER-WACHSMUTH, D. SCHMITZ, A. SCHULTZ VON DRATZIG, <i>I. Physikalisches Institut der RWTH Aachen and DESY</i> (Sep., 13 p.)	DESY 72/66 <u>Experimental Verification of the Kramers-Kronig Relation at High Energy.</u> H. ALVENSLEBEN, U. BECKER, P. J. BIGGS, W. BUSZA M. CHEN, R.T. EDWARDS, P.M. MANTSCH, THOMAS P. MCCORRISTON, T. NASH, M. ROHDE, H. F. W. SADROZINSKI, H. SCHUBEL, SAMUEL C.C. TING, and SAU LAN WU, <i>DESY and Department of Physics and Laboratory for Nuclear Science, Massachusetts Institute of Technology, Cambridge, Mass. 02139</i> , (Nov., 11 p.)
DESY 72/53	<u>On Nonanalytic Terms and the Evaluation of <math>c</math> in the <math>(3,3) + (3,3)</math> Model.</u> D. T. CORNWELL, <i>II. Institut für Theoretische Physik der Universität Hamburg</i> (Sep., 11 p.)	DESY 72/67 <u>Study of Electroproduction with a Streamer Chamber for <math>0.3 &lt; Q^2 &lt; 1.5 \text{ GeV}^2</math>, <math>m_p \leq W \leq 2.8 \text{ GeV}</math>.</u> V. ECKARDT, H.J. GEBAUER, P. JOOS, H. MEYER, B. NOROSKA, D. NOTZ, W.J. PODOLSKY, G. WOLF, and S. YELLIN, <i>DESY</i> , H. DAU, G. DREWS, D. GREUBEL, W. MEINCKE, H. NAGEL, E. RABE, <i>II. Institut für Experimentalphysik der Universität Hamburg</i> , (Dec., 62 p.)
DESY 72/54	<u>Chiral-Invariant Field Theory and Pion-Pion Scattering.</u> H. LEHRMANN, <i>II. Institut für Theoretische Physik der Universität Hamburg</i> , Sep., 9 p.)	DESY 72/68 <u>A Field Theory with Computable Large-Momenta Behaviour.</u> K. SYMANZIK, (Nov. 7 p.)
DESY 72/55	<u>Further Remarks About the <math>\epsilon(700)</math> Meson and Broken Scale Invariance.</u> B. RENNER, <i>II. Institut für Theoretische Physik der Universität Hamburg</i> , L. P. STAUNTON, <i>Department of Physics, University of North Carolina, Chapel Hill, N.C. 27514 USA</i> (Sep., 11 p.)	DESY 72/69 <u>Analysis of the Reaction <math>p\bar{p} \rightarrow p(\pi\pi)^0 p</math>, and the Question of Double-Pomeron Exchange in High-Energy Production Processes.</u> U. IDSCHOK, P. KOBE, F. SELONKE, B. WESSELS, <i>Physikalisches Institut der Universität Bonn</i> , V. BLOBEL, H. FESEFELDT, B. HELLWIG, D. MÖNKE-MEYER, P. SÖDING, <i>DESY</i> and <i>II. Institut für Experimentalphysik der Universität Hamburg</i> , H. FRANZ, J. W. LAMSA, N. SCHMITZ, W. SCHRANKEL, <i>Max-Planck-Institut für Physik und Astrophysik, München</i> , (Nov., 12 p.)
DESY 72/56	<u>Baryon-Antibaryon Bootstrap Model of the Meson Spectrum.</u> G. SCHIERHOLZ, <i>II. Institut für Theoretische Physik der Universität Hamburg</i> , (Sep., 29 p.)	DESY 72/70 <u>Electroproduction of <math>\pi^- \Delta^{++}(1236)</math> and of <math>\pi^+ \Delta^0(1236)</math> on Hydrogen.</u> I. DAMMANN, C. DRIVER, K. HEINLOTH, G. HOFMANN, F. JANATA, P. KAROW, D. LÜKE, D. SCHMIDT, G. SPECHT, (Dec., 46 p.)
DESY 72/57	<u>High Energy Electroproduction and Photoproduction of Kaons.</u> N. LEVY, W. MAJEROTTO, B. J. READ, (Sep., 49 p.)	DESY 72/71 <u>Inclusive <math>\pi^+</math> and <math>\pi^-</math> Distributions in Electroproduction on Protons.</u> I. DAMMANN, C. DRIVER, K. HEINLOTH, G. HOFMANN, F. JANATA, P. KAROW, D. LÜKE, D. SCHMIDT, G. SPECHT, (Dec., 52 p.)
DESY 72/58	<u>Nonlinear Realization of Chiral Symmetries and Localizability.</u> R. FLUME, <i>II. Institut für Theoretische Physik der Universität Hamburg</i> , (Oct., 8 p.)	DESY 72/72 <u>Bunch Lengthening and Power Losses due to the Vacuum Chamber Walls.</u> A. PIWINSKI, (Dec., 25 p.)
DESY 72/59	<u>Multi-Regge Exchange and Eikonalization.</u> J. BARTELS, <i>II. Institut für Theoretische Physik der Universität Hamburg and DESY</i> , (Oct., 38 p.)	DESY 72/73 <u>On Theories with Massless Particles.</u> K. SYMANZIK, (Dec., 10 p.)
DESY 72/60	<u>Spin <math>\frac{3}{2}</math> Calculations: <math>\pi\Delta</math> Photoproduction.</u> B. J. READ, (Oct., 16 p.)	DESY 72/74 <u>Pion Self-Energy Effects in the <math>\rho</math>-Meson from the Ward Identity.</u> F. GUTBROD, (Dec., 20 p.)
DESY 72/61	<u>Recent Developement in Electro- and Photoproduction.</u> G. Wolf, (Oct., 61 p.)	DESY 72/75 <u>Measurement of Inclusive Photoproduction at 3.2 GeV and Comparison with Electroproduction.</u> H. BURFEINDT, G. BUSCHHORN, H. GENZEL, P. HEIDE, U. KÖTZ, K.-H. MESS, P. SCHMÜSER, B. SONNE, G. VOGEL, B. H. WIJK, <i>DESY</i> and <i>II. Institut für Experimentalphysik der Universität Hamburg</i> (Dec., 14 p.)
DESY 72/62	<u>Generalized Vector Meson Dominance of Electromagnetic Interactions in a Relativistic Quark Model.</u> M. BÖHM, <i>Physikalisches Institut der Universität Hamburg</i> , H. JOOS and M. KRAMMER, <i>DESY</i> , (Oct., 8 p.)	DESY 72/76 <u>Linear Stochastic Processes and Intensity Correlations of Photon States.</u> G. ROEPSTORFF, <i>II. Institut für Theoretische Physik der Universität Hamburg</i> , (Dec., 23 p.)
DESY 72/63	<u>Properties of the B Meson Observed in <math>11 \text{ GeV}/c^2</math> <math>\pi^+ p</math> Interactions.</u> M. AFZAL, E. BASSLER, E. CALLIGARICH, C. CASO, C. CERRINA-FERANI, F. CONTE, C. COSTA, A. DAUDIN, D. EVANS, M. A. JABTOL, C. LEWIN, H. NAGEL, K. P. NEAT, S. RATTI, W. D. SCHLATTER, P. SÖDING and U. TREVISAN, <i>Durham-Genova-Hamburg-Milano-Saclay Collaboration</i> , (Nov., 24 p.)	
DESY 72/64	<u>Subject, Object and Measurement.</u> R. HAAG, <i>II. Institut für Theoretische Physik der Universität Hamburg</i> , (Nov., 8 p.)	
DESY 72/65	<u>Helium Gas Cooled Current Leads in a Refrigerator Cooled Superconductive Magnet System.</u> G. HORLITZ, S. WOLFF, <i>DESY</i> , C. P. PARSH, <i>Research Laboratory of Siemens AG, Erlangen</i> , (Nov., 17 p.)	

DESY 72/77	<u>Two-Photon Processes in the Parton Model.</u> T. F. WALSH, <i>II. Institut für Theoretische Physik der Universität Hamburg,</i> P. ZERWAS, DESY, (Dec., 11 p.)	DESY SR-72/13	<u>Inner Electron Excitation of Iodine in the Gaseous and Solid Phase.</u> F. J. COMES, U. NIELSEN, W.H.E. SCHWARZ (Jul., 28 p.)
DESY 72/78	<u>Quantum Field Theory Models with Derivative Couplings and Isotopic Spin.</u> J. TARSKI, <i>II. Institut für Theoretische Physik der Universität Hamburg,</i> (Dec., 17 p.)	DESY SR-72/14	<u>Optical Absorption of Tellurium in the Region Between 39 and 250 eV.</u> B. SONNTAG, T. TUOMI, G. ZIMMERER (DESY), <i>II. Institut für Experimentalphysik der Universität Hamburg.</i> (Aug., 20 p.)
DESY 72/79	<u>General Chiral Symmetry Breaking in <math>K_{l3}</math> Decays.</u> A. H. KAZI, <i>II. Institut für Theoretische Physik der Universität Hamburg,</i> (Dec., 13 p.)	DESY SR-72/15	<u>Photoabsorption of Atomic Sodium in the VUV</u> H. W. WOLFF, K. RADLER, B. SONNTAG, R. HAENSEL, <i>II. Institut für Experimentalphysik der Universität Hamburg and DESY.</i> (Sep., 29 p.)
DESY SR-72/1	<u>Excitation of the Cs-5p Core Level in Cesium Halides at 30 K.</u> V. SAILLE, <i>DESY and II. Institut für Experimentalphysik der Universität Hamburg,</i> M. SKIBOWSKI, <i>DESY and Sektion Physik der Universität München,</i> (Feb., 28 p.)	DESY SR-72/16	<u>Absorption Measurements of <math>AlAl_2</math> in the Region of the <math>Al L_{2,3}</math> Transitions.</u> W. GUDAT, C. KUNZ, DESY, J. KARLAU, <i>II. Institut für Experimentalphysik der Universität Hamburg.</i> (Oct., 16 p.)
DESY SR-72/2	<u>The Optical Spectra of Gaseous and Solid SF<sub>6</sub> in the Extreme Ultraviolet and Soft X-Ray Region.</u> D. BLECHSCHMIDT, E.E. KOCH, <i>DESY and Sektion Physik der Universität München,</i> R. HAENSEL, U. NIELSEN, <i>DESY and II. Institut für Experimentalphysik der Universität Hamburg,</i> T. SAWAGA, <i>DESY and Department of Physics, Tokyo University, Sendai, Japan,</i> (Feb., 9 p.)	DESY DV-72/1	<u>Use of an ARGUS 500 Computer to Support the Operation of a Linear Accelerator.</u> K. DAHLMANN, J. EHRIG, O. HELL, DESY, (Oct., 18 p.)
DESY SR-72/3	<u>Electronic Excitation of Solid Carbon Dioxide in the Extreme Ultraviolet.</u> E. E. KOCH, M. SKIBOWSKI, <i>Sektion Physik der Universität München,</i> (Feb., 9 p.)		
DESY SR-72/4	<u>K-Shell Fluorescence Yield for Beryllium, Boron, and Carbon.</u> K. FESER, <i>Sektion Physik der Universität München,</i> (Feb., 8 p.)		
DESY SR-72/5	<u>Soft X-Ray Absorption in Cu-Ni Alloys.</u> W. GUDAT, C. KUNZ, (Apr., 13 p.)		
DESY SR-72/6	<u>Close Similarity Between Photoelectric Yield and Photoabsorption Spectra in the Soft X-Ray Range.</u> W. GUDAT, C. KUNZ, (May, 12 p.)		
DESY SR-72/7	<u>The Optical Properties of Dilute Solid Rare Gas Alloys in the Extreme Ultraviolet.</u> R. HAENSEL, N. KOSUCH, U. NIELSEN, B. SONNTAG, <i>II. Institut für Experimentalphysik der Universität Hamburg,</i> U. RÖSSLER, <i>Fachbereich Physik der Universität Marburg,</i> (Jun., 37 p.)		
DESY SR-72/8	<u>The Vacuum Ultraviolet Spectrum of Napthalen Vapour for Photon Energies from 5 eV to 30 eV.</u> E. E. KOCH, A. OTTO, <i>Sektion Physik der Universität München,</i> K. RADLER, <i>II. Institut für Experimentalphysik der Universität Hamburg,</i> (Jun., 12 p.)		
DESY SR-72/9	<u>Optical Absorption of Se<sub>x</sub>Te<sub>1-x</sub> Alloys Between 38 eV and 65 eV.</u> B. SONNTAG, G. ZIMMERER, <i>II. Institut für Experimentalphysik der Universität Hamburg and DESY,</i> T. TUOMI, <i>University of Technology, Helsinki,</i> (Jun., 6 p.)		
DESY SR-72/10	<u>Core Levels of III-V Semiconductors.</u> W. GUDAT, E.E. KOCH, P.Y. YU, DESY, M. CARDONA, C. M. PENCHINA, <i>Max-Planck-Institut für Festkörperforschung, Stuttgart,</i> (Jul., 30 p.)		
DESY SR-72/11	<u>Optical and Photoelectric Properties of the Lead Chalcogenides.</u> M. CARDONA, C. M. PENCHINA, <i>Max-Planck-Institut für Festkörperforschung, Stuttgart,</i> E. E. KOCH, P. Y. YU, DESY, (Jul., 27 p.)		
DESY SR-72/12	<u>The Spectra of the Xenon Fluorides <math>XeF_2</math> and <math>XeF_4</math> in the Far UV-Region.</u> F. J. COMES, R. HAENSEL, U. NIELSEN, W.H.E. SCHWARZ, (Jul., 51 p.)		