

Harvard Physics PhD Theses, 1873-1953

1873

TROWBRIDGE, JOHN (S.D.). The following papers were presented: A New Form of Galvanometer; On the Electromotive Action of Liquids Separated by Membranes; On the Electrical Condition of Gas Flames; Ohm's Law Considered from a Geometrical Point of View; Induced Currents and Derived Circuits.

1884

PENROSE, CHARLES BINGHAM. The Mathematical Theory of Thermoelectricity and the Relation between Thermoelectricity and Superficial Energy.

WHITING, HAROLD. A New Theory of Cohesion Applied to the Thermodynamics of Liquids and Solids.

1885

HAYES, HAMMOND VINTON. On the Rotational Effect in a Magnetic Field, and Other Subjects. Other Subjects: Cause of Irregularities in the Action of Galvanic Batteries; The Dynamical Action between Two Coils as a Means of Electrical Current Measurement; The Dynamical Action of Electrical Currents as Applied to Galvanometers: A Reconsideration and Simplification of Maxwell's Treatment of Zonal Harmonics.

1886

McRAE, AUSTIN LEE (S.D.). The Effect of Magnetism in Producing Changes in the Dimensions of All Substances.

1896

ST. JOHN, CHARLES EDWARD. Wavelengths of Electricity on Iron Wires.

1900

BROWN, HARRISON HITCHCOCK. The Dielectric Constant of Water.

LYMAN, THEODORE. False Spectra from the Rowland Concave Grating.

McELFRESH, WILLIAM EDWARD. The Influence of Occluded Hydrogen upon the Electrical Properties of Certain Metals.

PIERCE, GEORGE WASHINGTON. Application of the Radio-Micrometer to the Measurement of Short Electric Waves.

AYRES, CHARLES HAMILTON. Measurement of the Internal Resistance of Galvanic Cells.

CAMPBELL, GEORGE ASHLEY. On Loaded Lines in Telephonic Transmission.

CHANT, CLARENCE AUGUSTUS. The 'Skin'-Effect in Electric Oscillators; with a Method of Determining Wavelengths.

1903

MacKAY, THOMAS CALVIN. On the Relation of the Hall Effect to the Current Density in Gold.

1904

ADAMS, EDWIN PLYMPTON. I. The Electromagnetic Effect of Moving Charged Spheres. II. Water Radioactivity.

HOGG, JOHN L. Pressure Gauges for High Vacua.

1905

BLACKWELL, HOWARD LANE. Dispersion in Electric Double Refraction.

1906

DAVIS, HARVEY NATHANIEL. I. A PQ Plane for Thermodynamic Cyclic Analysis. II. The Longitudinal Vibrations of a Rubbed String.

SMITH, ALPHEUS WILSON. Expansion and Compressibility of Ether and of Alcohol in the Neighborhood of Their Boiling Points.

1907

ADAMS, JOHN MEAD. The Transmission of Röntgen Rays through Metallic Sheets, and the Relatively Selective Absorption of Röntgen Rays in Certain Metals.

1908

BRIDGMAN, PERCY WILLIAMS. Mercury Resistance as a Pressure Gauge.

SHUDDMAGEN, CONRAD LOUIS BENONI. See SHUDEMAM, CONRAD LOUIS BENONI.

SHUDEMAN, CONRAD LOUIS BENONI. I. The Demagnetizing Factors for Cylindrical Iron Rods. II. A Study of Residual Charge in Dielectrics.

1911

CHAFFEE, EMORY LEON. A New Method of Impact Excitation of Undamped Electric Oscillations and Their Analysis by Means of Braun Tube Oscillographs.

HAYES, HARVEY CORNELIUS. An Investigation of the Errors in Cooling Curves and Methods for Avoiding These Errors; also a New Form of Crucible.

1913

PALMER, FREDERIC, JR. Volume Ionization Produced by Light of Extremely Short Wavelength.

TRUEBLOOD, HOWARD MOFFITT. On the Measurement of the Coefficient of the Joule-Thomson Effect in Superheated Steam.

WEBSTER, DAVID LOCKE. I. On an Electromagnetic Theory of Gravitation. II. On the Existence and Properties of the Ether.

1914

CLARK, HARRY. Sub-Helmholtzian Vibrations of a Rubbed String.

1915

GARDNER, IRVINE CLIFTON. Metallic Reflection in the Region of Extremely Short Wavelengths.

NUSBAUM, CHRISTIAN. Eddy Current and Hysteresis Losses in Iron at High Frequencies.

ROMBERG, ARNOLD. The Ratio of the Calorie at 73° to That at 20°.

SABINE, PAUL EARLS. The Energy of Photoelectrons as a Function of the Frequency for Light of Extremely Short Wavelengths.

SILSBEE, FRANCIS BRIGGS. A Study of the Inductance of Four-Terminal Resistance Standards.

1916

LAWTHER, HARRY PRESTON, JR. The Resistance and Capacity of Some Condensers for Frequencies from 50 to 1,200,000 Cycles per Second.

SMITH, THEODORE TOWNSEND. The Magnetic Properties of Hematite.

WEIBEL, ERNEST EDWARD. A Theoretical and Experimental Study of the Separately Excited Electrodynamometer.

1917

BECKER, ARMAN EDWARD. An Extension of Series Spectra, and an Experimental Study of a Theory of the Complex Zeeman Effect.

BRINSMADE, JAMES BEEBEE. Studies in the Absorption of Light by Gases and Crystals.

FLAMMER, ERNEST. Electric Circuits with Variable Resistances.

KEMBLE, EDWIN CRAWFORD. Studies in the Application of the Quantum Hypothesis to the Kinetic Theory of Gases and to the Theory of Their Infrared Absorption Bands.

LOOMIS, FRANCIS WHEELER. The Heat of Vaporization of Mercury.

1919

HU, KANG-FUH. Studies in X Rays.

1920

KEYS, DAVID ARNOLD. On a Piezoelectric Method of Measuring Explosion Pressures.

SCHAEFFER, ELMER RAYMOND. Atmospheric Attenuation of Ultraviolet Light.

WEN, YU CHING. A Theoretical Treatment of the Radiation Resistance of Antennae Excited by Damped and Undamped Waves at All Ranges of Wavelengths.

1921

MacLEOD, HECTOR JOHN. The Variation with Frequency of the Loss of Energy in Dielectrics.

1922

DANA, LEO ISADORE. The Latent Heat of Vaporization of Liquid Oxygen, Nitrogen, and Mixtures.

HULL, LEWIS MADISON. The Continuous Oscillations Maintained by an Electron Tube in a Single Periodic Circuit.

VAN VLECK, JOHN HASBROUCK. A Critical Study of Possible Models of the Normal Helium Atom.

1923

LITTLE, NOEL CHARLTON. Regenerative Phenomena in Vacuum Tubes.

MAZUMDER, KSHIRODE CHANDRA. The K Series Spectrum of Tungsten and the Coefficients of Absorption of X Rays by Lithium.

MILLER, CARL WALLACE. The Electrolytic Condenser.

SLATER, JOHN CLARKE. The Compressibility of the Alkali Halides.

YEH, CHI-SUN. The Effect of Hydrostatic Pressure on the Magnetic Permeability of Iron and Nickel.

1924

BALDES, EDWARD JAMES. High-Frequency Electric Filters.

1926

BOURGIN, DAVID GORDON. Intensities of the Lines of the Hydrogen Chloride Fundamental Band.

DRAKE, FREDERICK HALES. A Precision Measurement of the Velocity of Electric Waves.

KNIPP, ARTHUR RUSSELL. Calculation and Measurement of the Detection Coefficient of a Triode for Large Signal Strengths.

1927

BLACK, KNOX CHARLTON. A Dynamic Study of Magnetostriction.

1928

CRAWFORD, FRANZO HAZLETT. The Zeeman Effect in the Angstrom Bands of Carbon Monoxide.

UFFORD, CHARLES WILBUR. The Electrical Resistance of Alloys Under Pressure.

1929

DUNHAM, JAMES LAWRENCE. Intensity of Lines in the Harmonic Band of Hydrogen Chloride in the Near Infrared.

FREY, AUSTIN ROGERS. Preliminary Investigation of a New High-Frequency Method for Determining the Velocity of Light.

GLEASON, PAUL RAY. The Reflecting Power of Some Substances in the Extreme Ultraviolet.

HOGG, FRANK SCOTT. Stellar Spectrophotometry.

TUTTLE, WILLIAM NORRIS. Measurements of Harmonic Distortion in Plate Rectification by a Triode.

1930

ALMY, GERALD MARKS. The Zeeman Effect in Molecular Spectra of the Doublet Type.

ARMSTRONG, ALICE HALL (R). The Relative Intensities of Some Lines in the X-Ray Spectrum.

BARTLETT, JAMES HOLLEY. The Ionization of Multiatomic Molecules by Impact of Slow Electrons.

MUZZEY, DAVID SAVILLE, JR. Some Measurements of the Frequencies of Longitudinal Vibration for Bars of Magnetostrictive Materials.

REID, CHARLES DAVID. Investigation in the Velocity of Sound at Ultrasonic Frequencies Using Quartz Oscillators.

ZENER, CLARENCE. Quantum Mechanics of the Formation of Certain Types of Diatomic Molecules.

1931

DANFORTH, WILLIAM EDGAR, JR. The Effect of Pressure on the Dielectric Constant of Fourteen Liquids.

GRABAU, MARTIN. A Measurement of Precision of the Velocity of Sound in Air.

JEN, CHIH KUNG. A New Treatment of Electron-Tube Oscillators by an Extended Theory of Coupled Circuits.

ROBINSON, LIMMYE VERNON. Problems of Cepheid Variation.

STABLER, HOWARD PARKER. The Transverse Heat Effect in Single Crystal Bismuth Plates.

1932

BIRCH, FRANCIS. On the Electrical Resistance of Mercury at High Temperatures and High Pressures, and the Critical Point of Mercury.

CADY, WILLOUGHBY MILLER. The Spectra of the Calcium-Like Ions: Mn VI, Fe VII, Co VIII, and Ni IX.

HICKMAN, ROGER WAYNE. An Investigation of a Dynamic Method of Determining Critical Potentials in Mercury Vapor.

HUDSON, JAMES CRAMER. On the General X-Radiation from a Vapor.

JOHNSON, MONTGOMERY HUNT, JR. The Theory of Complex Spectra.

MIMNO, HARRY ROWE. A Study of the Operation of Vacuum Tubes at Relatively High Power Levels.

PERRY, CHARLOTTE TEMPEST. See PHILLIPS, CHARLOTTE PERRY.

PHILLIPS, CHARLOTTE PERRY (R). A Determination of e/m_0 for an Electron by Direct Measurement of the Velocity of Cathode Rays.

STEINBERGER, RAYMOND LEONARD. Magnetic Properties of Iron Nickel Alloys under Hydrostatic Pressure.

ZISMAN, WILLIAM ALBERT. The Effect of Pressure on the Electrical Conductance of Salt Solutions in Water.

1933

AIKEN, CHARLES BAYNE. Studies in the Detection of Two Modulated Wave with Application to the Problems of Broadcasting.

DOW, RICHARD BURT. The Viscosity of Mixtures of Liquids at High Pressures.

FEENBERG, EUGENE. The Scattering of Slow Electrons by Neutral Atoms.

GOLDMAN, STANFORD. Supersonic Measurement of the Directional Properties of Horns.

POWELL, WILSON MARCY. Photoelectric Measurements of the Transmission of Fluorite in the Schumann Region.

RIEKE, FOSTER FREDERICK. A Spectroscopic Study of Intermolecular Transfers of Rotational Energy.

ROGERS, BRUCE ALLISON. The Magnetic Properties of the Iron-Cobalt-Tungsten Alloys.

TOUSEY, RICHARD. An Apparatus for Determining the Optical Constants of Solids in the Extreme Ultraviolet with Application to Fluorite at -1216 \AA .

1934

BUCKINGHAM, STEPHEN ALVORD. A Study of Magnetostriction Applied to Phonographic Reproduction.

HALL, HARRY HEPBURN. The Velocity of Electric Waves.

HUNT, FREDERICK VINTON. The Use of a Frequency-Modulated Source in Reverberation Measurements.

JAMES, HUBERT MAXWELL. The Quantitative Treatment of Molecules by Wave Mechanics.

SCHNEIDER, EDWIN GEORGE. The Absorption of Extreme Ultraviolet Light by Some Crystalline Substances and the Resulting Luminescence.

SHURCLIFF, WILLIAM ASAHEL. The Band Spectrum of Carbon Monosulphide.

1935

COWAN, FREDERICK PIERCE. Some Thermal Methods of Measuring Loss of Power in Vacuum Tubes.

JORGENSEN, THEODORE, JR. The Band Spectra of the Hydrides of Lithium.

KEAN, CLARE HIBBERD. The Variation with Pressure of the Phase Diagram of the Binary Mixture Na-K.

KNIPP, JULIAN KNAUSE. Two Problems in the Quantum Mechanics of Diatomic Molecules.

PRESENT, RICHARD DAVID. I. Forbidden Transitions in Molecular Spectra. II. Excited States of the Hydrogen Molecule.

1936

ANDERSON, WILMER CLAYTON. A High-Frequency Method for Measuring the Velocity of Light.

FAY, CHARLES HEMPHILL. I. The Scattering of Fast Neutrons by Heavy Nuclei. II. A Refinement of the Heisenberg Theory of Ferromagnetism.

HEALEA, MONICA (R). Secondary Electron Emission from a Nickel Target Due to Bombardment by Positive Hydrogen Ions.

HEBB, MALCOLM HAYDEN. I. On Λ -type Doubling in $^3\Pi$ States of Diatomic Molecules Intermediate to Hund's Cases a and b. II. On the Paramagnetic Rotation of Tysonite.

PRESTON, WILLIAM MUNRO. Some Effects of Rare Gases on Metal Spectra.

SMITH, CHARLES GROVER. Optical and Electrical Characteristics of an Electrodeless Ring Discharge in Gases at Low Frequencies.

SMITH, NOYES DARLING, JR. The Intensity Distribution of the Continuous Spectrum of Hydrogen.

YOUNG, ROBERT THOMPSON, JR. Transition Effects and Burst Phenomena in the Cosmic Radiation.

1937

TATUM, GORDON RUSSELL. The Effect of High-Intensity Sound on Smokes and Other Aerosols.

1938

PURCELL, EDWARD MILLS. The Focusing of Charged Particles by a Spherical Condenser.

TALBOT, SAMUEL ARMSTRONG. Pupillography and the Pupillary Transient.

1939

AIKEN, HOWARD HATHAWAY. A Study of the Laws of Space Charge.

BANCROFT, DENNISON. The Velocity of Sound in Nitrogen at High Pressure.

1940

BROOKS, HARVEY. I. Diamagnetic Anisotropy and Electronic Structure of Aromatic Molecules. II. Ferromagnetic Anisotropy and the Itinerant Electron Model.

CLANCY, EDWARD PHILBROOK. The Induced Radioactivity of Krypton and Xenon.

COLE, ROBERT HUGH. Dielectric Constants of Polar Liquids and Solids.

MAA, DAH-YOU. Nonuniform Boundary Conditions in Room Acoustics.

WEISS, PETER REIFER. On the Theory of Ferromagnetism.

1941

FINKELSTEIN, ROBERT JAY. I. The Energy Levels of Chrome Alum. II. The Magnetic Susceptibility of Cerium Ethylsulfate.

HEILPRIN, LAURENCE BEDFORD. On Interfacial Surface Tension of Mercury and Water at High Pressures.

HURWITZ, HENRY, JR. I. The Ferromagnetic Anisotropy of Nickel. II. The Theory of Magnetism in Alloys. III. Interaction Energies in Radiation Theory.

JONES, ROBERT CLARK. On the Theory of the Thermal Diffusion Coefficient for Isotopes.

KEARY, THOMAS JOSEPH. A Study of Angles of Arrival of Radio Waves.

LEWIS, WILLARD DEMING. Topics in Magnetism.

LITTLE, ELBERT PAYSON. The Optical Properties of Quartz in the Schumann Region.

SMITH, WILLIAM VICK. The Surface Recombination of H Atoms, OH Radicals, and O Atoms.

SOMMERS, HENRY STERN, JR. The Beta Spectrum of O^{15} .

WATSON, ROBERT BARDEN. The Modulation of Sound Decay Curves.

1942

BERGSON, GUSTAV. The Design and Construction of an Apparatus for Measuring the Mean Life of the Excited State.

DWYER, ROBERT JOSEPH. I. The Energy of Dissociation of Water Vapor. II. The Persistence of Molecular Vibration in Collisions.

GILROY, JOHN. The Absorption of Air for Radiations in the Extreme Ultraviolet of Wave Lengths 60A to 380A.

PLESSET, ERNST HAECKEL. Studies of Excited Nuclei.

SARD, ROBERT DANIEL. The Absorption of Mesotrons.

1946

GOTTSCHALK, WINSTON MALCOLM, S.B. (Princeton University.) 1929, S.M. (California Institute of Technology) 1932. The Calculation of Line Strengths in the $3d^7 4s-3d^7 4p$ Array in Fe I in Intermediate Coupling and Application to the Solar Curve of Growth.

KING, DONALD DE WOLF PERCIVAL, A.B. 1942, A.M. 1944. Microwave Antenna Impedance.

RUDMOSE, H. WAYNE, A.B. (University of Texas) 1935, A.M. (ibid.) 1936. Sound Spectra in Aircraft as Influenced by Acoustical Treatment.

1947

BENDER, ROGER STILLMAN, S.B. (Yale University) 1936. A New Type of Charged Particle Spectrometer Capable of High Resolving Power and Large Solid Angle.

CLARK, KENNETH COURTRIGHT, A.B. (University of Texas) 1940, A.M. (Harvard University) 1941. A Light Source for Hydrogen and Helium Emission Lines in the Extreme Ultraviolet and its Application to the Measurement of Absorption Coefficients of O₂ and N₂.

HEINEMAN, MARIAN HENRIETTA. See ROSE, MARIAN HEINEMAN.

HOLT, ROLAND BELL, A.B. (University of Texas) 1940, A.M. (ibid.) 1942. I. Absorption Spectrum of Hydrogen Peroxide. II. Role of Hydrogen Peroxide in the Thermal Combination of Hydrogen and Oxygen.

MIDDLETON, DAVID, A.B. (Harvard University) 1942, A.M. (Harvard University) 1945. Some General Results in the Theory of Noise through Nonlinear Devices.

RICHARDS, PAUL IRVING, Stud. 1940-43, A.M. 1946. General Impedance-Function Theory and Transmission-Line Networks.

ROSE, MARIAN HEINEMAN, (R), A.B. (Barnard College) 1942, A.M. (Columbia University) 1944. Kinetic Theory of Resistance in Rarefied Gases.

1948

BRAGG, JOHN KENDAL, S.B. (Harvard University) 1941. The Interaction of Nuclear Electric Quadrupole Moments with Molecular Rotation.

CASE, KENNETH MYRON, S.B. (Harvard University) 1945, A.M. (Harvard University) 1946. The Magnetic Moments of the Neutron and Proton.

de HOFFMANN, FREDERIC, S.B. (Harvard University) 1945, A.M. (Harvard University) 1947. Neutron-Deuteron Scattering at High Energies.

EISENSTEIN, JULIAN CALVERT, S.B. (Harvard University) 1941, A.M. (Harvard University) 1942. I. An Application to the Deuteron Problem of the Variation-Iteration Method for Solving Linear Differential Equations. II. Neutron-Proton Scattering at Intermediate and High Energies.

FEER, DANIEL BERNARD, S.B. (Harvard University) 1945 (1944), A.M. (Harvard University) 1946. The Emission of Radiation in the Disintegration of Mesons.

HOLTON, GERALD JAMES, A.B. (Wesleyan University) 1941, A.M. (ibid.) 1942, A.M. (Harvard University) 1946. Ultrasonic Propagation in Liquids at High Pressures.

KARPLUS, ROBERT, S.B. (Harvard University) 1947 (1945), A.M. (Harvard University) 1946. Studies in Molecular Spectroscopy.

KOHN, WALTER, B.A. (University of Toronto) 1945, M.A. (ibid.) 1946. Collisions of Light Nuclei.

LEPORE, JOSEPH VERNON, S.B. (Allegheny College) 1943. Neutron Scattering from Helium and the Polarization of Neutrons and Protons by Scattering.

LIPPMANN, BERNARD ABRAM, B.E.E. (Polytechnic Institute of Brooklyn) 1934, S.M. (University of Michigan) 1935. Scattering of Slow Neutrons by Bound Protons: A Variational Calculation.

PAKE, GEORGE EDWARD, S.B. (Carnegie Institute of Technology) 1945, S.M. (ibid.), 1945. The Structure of Nuclear Resonance Absorption Lines in Crystals.

ROHRLICH, FRITZ, Chem. E. (Hebrew Technical Institute) 1943, A.M. (Harvard University) 1947. I. Neutron-Proton Scattering at Intermediate and High Energies. II. On the Configurations d^2sp , d^3p , and d^7p . III. The Classification of the Odd Terms of Ti I.

SYMON, KEITH RANDOLPH, S.B. (Harvard University) 1942, A. M. (Harvard University) 1943. Fluctuations in Energy Lost by High Energy Charged Particles in Passing through Matter.

1949

ANDERSON, PHILIP WARREN, S.B. (Harvard University) 1943, A.M. (Harvard University) 1947. The Theory of Pressure Broadening of Spectral Lines in the Microwave and Infrared Regions.

BRACHMAN, MALCOLM K., A.B. (Yale University) 1945, A.M. (Harvard University) 1947. Relativistic Correction to Nucleon Magnetic Moments.

BROIDA, HERBERT PHILIP, A.B. (University of Colorado) 1944, A.M. (Harvard University) 1946. Theoretical and Experimental Investigation of the Thermal Reaction of Hydrogen and Oxygen at Relatively Low Temperatures.

CLAPP, ROGER EDGE, A.B. (Harvard University) 1941, A.M. (Harvard University) 1942. A Variational Solution of the Nuclear Three-Body Problem.

CLARK, MELVILLE, JR., S.B. (Massachusetts Institute of Technology) 1943, A.M. (Harvard University) 1947. On the Hyperfine Structure of Deuterium.

COOL, RODNEY LEE, A.B. (University of South Dakota) 1942, A.M. (Harvard University) 1947. Cloud Chamber Observations of Mesons.

CORLISS, LESTER MYRON, S.B. (College of the City of New York) 1940, A.M. (Harvard University) 1947. The Paramagnetism of Copper, Nickel, and Cobalt Compounds.

DUNN, BEVERLY CHARLES, JR., A.B. (Harvard University) 1940, A.M. (Harvard University) 1942. Microwave Field-Measurements.

FELDMAN, DAVID, S.B. (Coll. of the City of New York) 1940, S.M. (New York Univ.) 1946. On the Radiative Correction to the Klein-Nishina Formula.

FOWLER, EARLE CABELL, S.B. (University of Kentucky) 1942, A.M. (Harvard University) 1947. Delayed Proton-Electron Emission Induced in Aluminum by Cosmic Ray Neutrons.

- GLAUBER, ROY JAY, S.B. (Harvard University) 1945 (1946), A.M. (Harvard University) 1947. The Relativistic Theory of Meson Fields.
- HYDE, WALTER LEWIS, S.B. (Harvard University) 1941, A.M. (Harvard University) 1943. Infrared Spectroscopy from 24 to 37 Microns.
- KATZENSTEIN, JACK, S.B. (Duke University) 1944, A.M. (Harvard University) 1946. The Radiative Scattering of Positrons and Electrons.
- KUHN, THOMAS SAMUEL, S.B. (Harvard University) 1944 (1943), A.M. (Harvard University) 1946. The Cohesive Energy of Monovalent Metals as a Function of their Atomic Quantum Defects.
- LEES, WAYNE LOWRY, A.B. (Swarthmore College) 1937, A.M. (Harvard University) 1940. Dielectric Constants, as Functions of Pressure and Temperature, of Water and Three Alkyl Halides.
- McLANE, CHARLES KEITH, S.B. (University of Wisconsin) 1943, S.M. (ibid.) 1944. Hydrogen Peroxide in the Thermal Reaction of Hydrogen and Oxygen.
- MILLETT, WALTER ELMER, S.B. (University of Florida) 1940, S.M. (ibid.) 1942. Considerations of the Focusing of Charged Particles at Relativistic Energies in Crossed Electric and Magnetic Fields.
- NEUMAN, MAURICE, S.B. (University of Akron) 1944, A.M. (Harvard University) 1947. On the Interaction of Mesons with an Electromagnetic Field.
- ROSENBLUTH, ARIANNA WRIGHT (R), B.S. (Rice Institute) 1946, A.M. (Radcliffe College) 1947. Some Aspects of Paramagnetic Relaxation.
- SLICHTER, CHARLES PENCE, A.B. (Harvard University) 1945 (1946), A.M. (Harvard University) 1947. A Study of Microwave Absorption in Paramagnetic Solids.
- SNYDER, JAMES NEWTON, S.B. (Harvard University) 1945 (1946), A.M. (Harvard University) 1947. Stimulated Decay of Mesons.
- VOORHIES, HUGH GORDON, JR., S.B. (Harvard University) 1942. Meson Detection with Silver Chloride Crystals.
- WHITTEMORE, WILLIAM LESLIE, A.B. (Colby College) 1945, A.M. (Harvard University) 1946. The Silver Chloride Crystal Ionization Detector.
- WRIGHT, ARIANNA. See ROSENBLUTH, ARIANNA WRIGHT.

1950

ANDERSON, DAVID LEONARD, S.B. (Harvard University) 1941, A.M. (Harvard University) 1947. Some Radioactive Xenon Isotopes.

BERSOHN, RICHARD, S.B. (Massachusetts Institute of Technology) 1944, A.M. (Harvard University) 1947. Hyperfine Structure in Molecules and a Note on Magnetic Properties of Potassium Ferricyanide.

BODANSKY, DAVID, S.B. (Harvard University) 1944 (1943), A.M. (Harvard University) 1948. Neutron Energy Distribution in Proton Bombardment of Beryllium.

BRANSCOMB, LEWIS McADORY, A.B. (Duke University) 1945, A.M. (Harvard University) 1947. Anomalous Rotation of Molecules with Applications to the Temperature of the Upper Atmosphere and a Note on Maximizing the Ratio of 'Signal to Noise' in Spectrophotometry of Weak Light Sources.

BROWN, FREDERICK CALVIN, S.B. (Harvard University) 1946 (1945), A.M. (Harvard University) 1947. Nuclear Interactions of Cosmic Rays in a Silver Chloride Crystal.

BROWN, RICHARD MAURICE, A.B. (Harvard University) 1945 (1944), A.M. (Harvard University) 1947. The Nuclear Magnetic Resonance in Weak Fields.

CROSS, WILLIAM GUNN, B.A. (University of Toronto) 1943, M.A. (ibid.) 1946, A.M. (Harvard University) 1949. The Conservation of Energy and Momentum in Compton Scattering.

DANDURAND, PAUL MAURICE, Ingénieur Diplômé (Ecole Polytechnique) 1947, A.M. (Harvard University) 1949. Electron Density and Spectroscopic Measurements in Mercury and Cesium Vapors.

DE WITT, BRYCE SELIGMAN, S.B. (Harvard University) 1943, A.M. (Harvard University) 1947. I. The Theory of Gravitational Interactions. II. The Interaction of Gravitation with Light.

GARDNER, JOHN HALE, S.B. (Utah State Agricultural College) 1943, A.M. (Harvard University) 1947. A Precise Measurement of the Proton Magnetic Moment in Bohr Magnetons.

JURETSCHKE, HELLMUT JOSEPH, S.B. (Harvard University) 1946 (1944), A.M. (Harvard University) 1947. The Surface Energy and Surface Structure of Metals.

KEILSON, JULIAN, S.B. (Brooklyn College) 1947, A.M. (Harvard University) 1948. The Splitting of L-Shells in Heavy Nuclei by the Tensor Interaction.

KLEIN, ABRAHAM, A.B. (Brooklyn College) 1947, A.M. (Harvard University) 1948. On the Relativistic Theory of Mesons Fields. I. Electromagnetic Properties of Nucleons. II. The Coupling of a Kemmer Field to a Dirac Field.

KOHLBERG, ARTHUR IRWIN, A.B. (Columbia University) 1943, A.M. (Harvard University) 1947. Collisional Excitation of OI in Nebulae and in the Aurora Borealis.

KOLSKY, HARWOOD GEORGE, S.B. (University of Kansas) 1943, S.M. (ibid.) 1947, A.M. (Harvard University) 1948. The Radio-Frequency Spectrum of H₂ in a Magnetic Field.

LANDAUER, ROLF WILLIAM, S.B. (Harvard University) 1947 (1945), A.M. (Harvard University) 1947. Phase Integral Approximations in Wave Mechanics. I. Reflections in One-Dimensional Wave Mechanics. II. Phase Integral Approximation in Two and Three Dimensions.

McAFEE, KENNETH BAILEY, JR., S.B. (Harvard University) 1946 (1945), A.M. (Harvard University) 1947. A Study of the Absorption of Some Gases at Microwave Frequencies.

MERZBACHER, EUGEN, A.M. (Harvard University) 1948. Higher Order Effects in Beta Decay.

MOTTELSON, BEN ROY, S.B. (Purdue University) 1947, A.M. (Harvard University) 1948. The Ground States of Lithium 6 and Lithium 7.

NONNEMAKER, GEORGE MORRIS, A.B. (Bowling Green State University) 1941, A.M. (Harvard University) 1947. Cloud Chamber Analysis of Selected Particles in the Sea-Level Cosmic Radiation.

RÜDENBERG, HERMANN GÜNTHER, S.B. (Harvard University) 1941, A.M. (Harvard University) 1942. Distributed Coupling and Amplification of Electric Waves.

SACHS, ALLAN MAXWELL, A.B. (Harvard University) 1942, A.M. (Harvard University) 1947. Nuclear Spin-Lattice Relaxation in Ammonium Salts.

SELIGMAN, CARL BRYCE. See DE WITT, BRYCE SELIGMAN.

SLADE, CHALONER BERRY, A.B. (Harvard University) 1939, A.M. (Columbia University) 1941. Experimental Separation of the Helium Isotope of Mass Three by Thermal Diffusion.

SLEPIAN, DAVID, Stud. (University of Michigan) 1941-43, A.M. (Harvard University) 1947. Wave Propagation in Periodic Media: Bloch-Wave Solutions of Elliptic Partial Differential Equations.

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