

Get Free Causality Electromagnetic Induction And Gravitation A Different Approach To The Theory Of Electromagnetic And Read Pdf Free

Theory of Gravitation, 1959-1963 Jan 15 2022

Changing Order May 19 2022 This fascinating study in the sociology of science explores the way scientists conduct, and draw conclusions from, their experiments. The book is organized around three case studies: replication of the TEA-laser, detecting gravitational rotation, and some experiments in the paranormal. "In his superb book, Collins shows why the quest for certainty is disappointed. He shows that standards of replication are, of course, social, and that there is consequently no outside standard, no Archimedean point beyond society from which we can lever the intellects of our fellows."—Donald M. McCloskey, *Journal of Economic Psychology* "Collins is one of the genuine innovators of the sociology of scientific knowledge. . . . Changing Order is a rich and entertaining book."—Isis "The book gives a vivid sense of the contingent nature of research and is generally a good read."—Augustine Brannigan, *Nature* "This provocative book is a review of [Collins's] work, and an attempt to explain how scientists fit experimental results into pictures of the world. . . . A promising start for new explorations of our image of science, too often presented as infallibly authoritative."—Jon Turney, *New Scientist*

Gravito-Electromagnetism and Mass Induction Nov 25 2022 Starting from the single postulate of the conservation of mass-energy it is shown how gravity can be reformulated as a set of generalised electromagnetic-type field equations. This unconventional approach leads to some remarkable new phenomena including mass induction, superconductors as laboratory gravity sources and longitudinal gravity waves. On the cosmological scale it removes event horizons and Black Holes and is found to provide the natural theoretical framework for Pseudo-static cosmology. These surprising results suggest that General Relativity and Gravito-electromagnetism may be just two limiting cases of a yet more fundamental theory of gravity that remains to be formulated.

Gravity and Electric Charge Feb 22 2020 The many similarities between gravitational and electromagnetic fields suggest that they may be characterized by a single (super) source function. A complex vector source is found to yield the correct interaction strengths (the scalar products of these vectors) for the classical inverse-square law forces between electrically charged masses. The real vector component has the magnitude of the coulomb charge of the body. The magnitude of the imaginary vector component is given by the mass of the body renormalized in units of charge. Complex vector charges (CVC), for the classical electron, proton, and neutron are developed. Appropriate sums of these vectors represent the atoms. Substitution of CVC for coulomb (scalar) charge in Maxwell's equations generates two separable sets of equations: the real component set, characterizing electromagnetic fields; and the imaginary component set,

characterizing gravitational fields. The imaginary electric field represents the Newtonian gravitational field, whereas the imaginary magnetic field results in motional gravitational forces similar to those found in general relativity theory. Such forces would result in the gradual alignment of planetary orbits and spins. Acceleration of CVC generates (classical) complex radiation fields, that is, positive-energy photons and negative-energy gravitons. Thus conservation of energy requires that all charge-neutral, finite inertial rest mass particles possess non-vanishing electromagnetic moments. Extension to a nonclassical theory that can include both atomic and nuclear binding energies is suggested. (Author).

William Whewell. ... An account of his Writings, with selections from his literary and scientific Correspondence. By I. Todhunter Mar 05 2021

The Philosophy of the Inductive Sciences, Founded Upon Their History Sep 18 2019

Unified Field Theory Apr 18 2022 "UKRAY" - UNIFIED FIELD THEORY - - A New Unification Theory on Electromagnetic Gravitation- PREFACE "This study which aims to prove that all forces and laws of physics exist in a single unified structure at the Starting and Ending moment of the Universe analyzes all laws of physics within the framework of a unified structure from Newton Mechanics to Quantum Theory, Einstein Relativity to modern 11-dimensional Super string theory. The study may also be considered as a "MODERN ERA PRINCIPIA" since it was started to be written in about 300 years (early 2007) after the publication of the great study of Newton named "PRINCIPIA" (1703-1707) on the topic of gravity theories. The volume includes SEVEN CHAPTERS in the form of SEVEN different articles which follow each other and make clear the subject when they are read consecutively. In addition, FOUR additional chapters in the form of APPENDIXES in nature of FUNDAMENTALS OF MATHEMATICS were also included at the end of the volume for readers who have a less degree of technical knowledge about the topic... THIS THEORY, GETS THESE QUESTIONS INTO; - A CHANGE into Gravitational field and field equations, STATIC AND UNIVERSAL GRAVITATIONAL CONSTANTS, - THE DYNAMICS OF Gravitational field with Combining the Electromagnetics Theory. - THE VELOCITY OF LIGHT COULD BE EXCEEDED? THIS THEORY WAS PREPARED AS A CONSEQUENCE OF APPROXIMATELY 16 YEARS STUDY, - WHOLE "666" PAGE - INCLUDES ABOUT 100 THEOREMS, - AND 1000 ILLUSTRATED DRAWINGS, - ASSERTS THE NEW PHYSICS OF THE UNIVERSE. AND MUCH MORE... "I imagined the situation of a mass falling towards the singularity point in a blackhole singularity in electrodynamic gravity conditions for some relative structures in the electromagnetic theory which is the most important and understandable theory in the classical physics I had comprehensive knowledge in my last years of my undergraduate term of the academic life (in about 2000) in an article of Faraday on the topic of the law of induction I had incidentally seen while I was examining the existing physics literature in the faculty's library. I wondered if the law of induction in a circular conducting wire differently perceived according to an observer in the train and the one on the land in the special relativity of Einstein may occur by the increase and decrease of mass during the course of falling to singularity in this blackhole and may create an electromagnetic gravity wave and a magnetic charge current which would

decrease the impact of gravitation in parallel to this. This oriented me to a series of researches to study and create this theory for years and then directed me to create a unified electromagnetic gravity theory composed of SEVEN ARTICLES in total I will submit here in order and step by step. Even though the theory includes a deductive mathematical approach, tensor calculation and geometric modellings, I will give solutions of Einstein-Maxwell Equations with a different mathematical 4x4 Pauli-Dirac Spinors and Tensor calculation construction in direction of closed extra dimension of the space (5 Dimension Effect) What Does the Theory Tell? {Short Abstract and Philosophy of the Theory} The THEORY summarizes the general and simple mathematical description of the universe in the form of general conclusion items and forecasts the followings; Basic Projections of the Theory? - NEW MODEL OF AN ATOM, - NEW MODEL OF THE UNIVERSE, - CHANGE IN GALILEO Inertia Principle, - A Fundamental Change in the Structure of MAXWELL's EQUATIONS, AN ADDITIONAL TERMS AND ADDITIONS, - A CHANGE IN POYNTING ENERGY THEORY, - A NEW ATOMIC MODEL, - A NEW UNIVERSE MODEL, - CHANGE IN GALILEO'S PRINCIPLE OF INERTIA, - A FUNDEMENTAL CHANGE AND AN ADDITIONAL TERM IN THE STRUCTURE IF MAXWELL EQUATIONS, - A CHANGE IN STATIC FIELD EQUATIONS OF THE GRAVITY FIELD AND IN THE UNIVERSAL GRAVITY CONSTANT. - CHANGE IN POYNTING ENERGY THEOREM, - HOW CAN THE VELOCITY OF LIGHT BE EXCEEDED?

**William Whewell, D.D., Master of Trinity College, Cambridge Jul 09 2021
Ukray Unified Field Theory Jun 27 2020 "UKRAY" - UNIFIED FIELD THEORY - - A New Unification Theory on Electromagnetic Gravitation- THIS THEORY, GETS THESE QUESTIONS INTO; - A CHANGE into Gravitational field and field equations, STATIC AND UNIVERSAL GRAVITATIONAL CONSTANTS, - THE DYNAMICS OF Gravitational field with Combining the Electromagnetics Theory. - THE VELOCITY OF LIGHT COULD BE EXCEEDED? THIS THEORY WAS PREPARED AS A CONSEQUENCE OF APPROXIMATELY 16 YEARS STUDY, - WHOLE "666" PAGE- INCLUDES ABOUT 100 THEOREMS, - AND 1000 ILLUSTRATED DRAWINGS, - ASSERTS THE NEW PHYSICS OF THE UNIVERSE. AND MUCH MORE... "I imagined the situation of a mass falling towards the singularity point in a blackhole singularity in electrodynamic gravity conditions for some relative structures in the electromagnetic theory which is the most important and understandable theory in the classical physics I had comprehensive knowledge in my last years of my undergraduate term of the academic life (in about 2000) in an article of Faraday on the topic of the law of induction I had incidentally seen while I was examining the existing physics literature in the faculty's library. I wondered if the law of induction in a circular conducting wire differently perceived according to an observer in the train and the one on the land in the special relativity of Einstein may occur by the increase and decrease of mass during the course of falling to singularity in this blackhole and may create an electromagnetic gravity wave and a magnetic charge current which would decrease the impact of gravitation in parallel to this. This oriented me to a series of researches to study and create this theory for years and then directed me to create a unified electromagnetic gravity theory composed of SEVEN ARTICLES in total I will submit here in order and step by step. Even though the theory includes a deductive**

mathematical approach, tensor calculation and geometric modellings, I will give solutions of Einstein-Maxwell Equations with a different mathematical 4x4 Pauli-Dirac Spinors and Tensor calculation construction in direction of closed extra dimension of the space (5 Dimension Effect) "This study which aims to prove that all forces and laws of physics exist in a single unified structure at the Starting and Ending moment of the Universe analyzes all laws of physics within the framework of a unified structure from Newton Mechanics to Quantum Theory, Einstein Relativity to modern 11-dimensional Super string theory. The study may also be considered as a "MODERN ERA PRINCIPIA" since it was started to be written in about 300 years (early 2007) after the publication of the great study of Newton named "PRINCIPIA" (1703-1707) on the topic of gravity theories. The volume also includes SEVEN CHAPTERS in the form of SEVEN different articles which follow each other and make clear the subject when they are read consecutively. In addition, FOUR additional chapters in the form of APPENDIXES in nature of FUNDAMENTALS OF MATHEMATICS were also included at the end of the volume for readers who have a less degree of technical knowledge about the topic..."What Does the Theory Tell? {Short Abstract and Philosophy of the Theory}The THEORY summarizes the general and simple mathematical description of the universe in the form of general conclusion items and forecasts the followings; Basic Projections of the Theory? - NEW MODEL OF AN ATOM, - NEW MODEL OF THE UNIVERSE, - CHANGE IN GALILEO Inertia Principle, - A Fundamental Change in the Structure of MAXWELL's EQUATIONS, AN ADDITIONAL TERMS AND ADDITIONS, - A CHANGE IN POYNTING ENERGY THEORY, - A NEW ATOMIC MODEL, - A NEW UNIVERSE MODEL, - CHANGE IN GALILEO'S PRINCIPLE OF INERTIA, - A FUNDEMENTAL CHANGE AND AN ADDITIONAL TERM IN THE STRUCTURE IF MAXWELL EQUATIONS, - A CHANGE IN STATIC FIELD EQUATIONS OF THE GRAVITY FIELD AND IN THE UNIVERSAL GRAVITY CONSTANT. - CHANGE IN POYNTING ENERGY THEOREM, - HOW CAN THE VELOCITY OF LIGHT BE EXCEEDED?

Science Rules May 27 2020 Included is a famous nineteenth-century debate about scientific reasoning between the hypothetico-deductivist William Whewell and the inductivist John Stuart Mill; and an account of the realism-antirealism dispute about unobservables in science, with a consideration of Perrin's argument for the existence of molecules in the early twentieth century.

Conceptual Evolution of Newtonian and Relativistic Mechanics Apr 06 2021 This book provides an introduction to Newtonian and relativistic mechanics. Unlike other books on the topic, which generally take a 'top-down' approach, it follows a novel system to show how the concepts of the 'science of motion' evolved through a veritable jungle of intermediate ideas and concepts. Starting with Aristotelian philosophy, the text gradually unravels how the human mind slowly progressed towards the fundamental ideas of inertia physics. The concepts that now appear so obvious to even a high school student took great intellectuals more than a millennium to clarify. The book explores the evolution of these concepts through the history of science. After a comprehensive overview of the discovery of dynamics, it explores fundamental issues of the properties of space and time and their relation with the laws of motion. It also explores the concepts of spatio-temporal locality and fields, and offers a philosophical discussion of

relative motion versus absolute motion, as well as the concept of an absolute space. Furthermore, it presents Galilean transformation and the principle of relativity, inadequacy of Galilean relativity and emergence of the spatial theory of relativity with an emphasis on physical understanding, as well as the debate over relative motion versus absolute motion and Mach's principle followed by the principle of equivalence. The natural follow-on to this section is the physical foundations of general theory of relativity. Lastly, the book ends with some new issues and possibilities regarding further modifications of the laws of motion leading to the solution of a number of fundamental issues closely connected with the characteristics of the cosmos. It is a valuable resource for undergraduate students of physics, engineering, mathematics, and related disciplines. It is also suitable for interdisciplinary coursework and introductory reading outside the classroom.

How the Great Scientists Reasoned Nov 01 2020 The scientific method is one of the most basic and essential concepts across the sciences, ensuring that investigations are carried out with precision and thoroughness. This book teaches the basic modes of scientific thought, not by philosophical generalizations, but by illustrating in detail how great scientists from across the sciences solved problems using scientific reason.

Wave-theory! Sep 23 2022

A Level Physics Quick Study Guide & Workbook Mar 17 2022 A Level Physics Quick Study Guide & Workbook: Trivia Questions Bank, Worksheets to Review Homeschool Notes with Answer Key PDF (Cambridge Physics Study Guide with Answer Key for Self-Teaching/Learning) includes worksheets to solve problems with hundreds of trivia questions. "A Level Physics Study Guide" with answer key PDF covers basic concepts and analytical assessment tests. "A Level Physics Question Bank" PDF book helps to practice workbook questions from exam prep notes. A level physics quick study guide with answers includes self-learning guide with verbal, quantitative, and analytical past papers quiz questions. A Level Physics trivia questions and answers PDF download, a book to review questions and answers on chapters: Accelerated motion, alternating current, AS level physics, capacitance, charged particles, circular motion, communication systems, electric current, potential difference and resistance, electric field, electromagnetic induction, electromagnetism and magnetic field, electronics, forces, vectors and moments, gravitational field, ideal gas, kinematics motion, Kirchhoff's laws, matter and materials, mechanics and properties of matter, medical imaging, momentum, motion dynamics, nuclear physics, oscillations, waves, quantum physics, radioactivity, resistance and resistivity, superposition of waves, thermal physics, work, energy and power worksheets for college and university revision notes. A Level Physics workbook PDF download with free sample book covers beginner's questions, textbook's study notes to practice worksheets. Physics quick study guide PDF includes college workbook questions to practice worksheets for exam. "A Level Physics Workbook" PDF, a quick study guide with chapters' notes for IGCSE/NEET/MCAT/SAT/ACT/GATE/IPhO competitive exam. "A Level Physics Worksheets" PDF to review problem solving exam tests from physics practical and textbook's chapters as: Chapter 1: Accelerated Motion

Worksheet Chapter 2: Alternating Current Worksheet Chapter 3: AS Level Physics Worksheet Chapter 4: Capacitance Worksheet Chapter 5: Charged Particles Worksheet Chapter 6: Circular Motion Worksheet Chapter 7: Communication Systems Worksheet Chapter 8: Electric Current, Potential Difference and Resistance Worksheet Chapter 9: Electric Field Worksheet Chapter 10: Electromagnetic Induction Worksheet Chapter 11: Electromagnetism and Magnetic Field Worksheet Chapter 12: Electronics Worksheet Chapter 13: Forces, Vectors and Moments Worksheet Chapter 14: Gravitational Field Worksheet Chapter 15: Ideal Gas Worksheet Chapter 16: Kinematics Motion Worksheet Chapter 17: Kirchhoff's Laws Worksheet Chapter 18: Matter and Materials Worksheet Chapter 19: Mechanics and Properties of Matter Worksheet Chapter 20: Medical Imaging Worksheet Chapter 21: Momentum Worksheet Chapter 22: Motion Dynamics Worksheet Chapter 23: Nuclear Physics Worksheet Chapter 24: Oscillations Worksheet Chapter 25: Physics Problems AS Level Worksheet Chapter 26: Waves Worksheet Chapter 27: Quantum Physics Worksheet Chapter 28: Radioactivity Worksheet Chapter 29: Resistance and Resistivity Worksheet Chapter 30: Superposition of Waves Worksheet Chapter 31: Thermal Physics Worksheet Chapter 32: Work, Energy and Power Worksheet

Solve "Accelerated Motion Study Guide" PDF, question bank 1 to review worksheet: Acceleration calculations, acceleration due to gravity, acceleration formula, equation of motion, projectiles motion in two dimensions, and uniformly accelerated motion equation. Solve "Alternating Current Study Guide" PDF, question bank 2 to review worksheet: AC power, sinusoidal current, electric power, meaning of voltage, rectification, and transformers. Solve "AS Level Physics Study Guide" PDF, question bank 3 to review worksheet: A levels physics problems, atmospheric pressure, centripetal force, Coulomb law, electric field strength, electrical potential, gravitational force, magnetic, electric and gravitational fields, nodes and antinodes, physics experiments, pressure and measurement, scalar and vector quantities, stationary waves, uniformly accelerated motion equation, viscosity and friction, volume of liquids, wavelength, and sound speed. Solve "Capacitance Study Guide" PDF, question bank 4 to review worksheet: Capacitor use, capacitors in parallel, capacitors in series, and energy stored in capacitor. Solve "Charged Particles Study Guide" PDF, question bank 5 to review worksheet: Electrical current, force measurement, Hall Effect, and orbiting charges. Solve "Circular Motion Study Guide" PDF, question bank 6 to review worksheet: Circular motion, acceleration calculations, angle measurement in radians, centripetal force, steady speed changing velocity, steady speed, and changing velocity. Solve "Communication Systems Study Guide" PDF, question bank 7 to review worksheet: Analogue and digital signals, channels comparison, and radio waves. Solve "Electric Current, Potential Difference and Resistance Study Guide" PDF, question bank 8 to review worksheet: Electrical current, electrical resistance, circuit symbols, current equation, electric power, and meaning of voltage. Solve "Electric Field Study Guide" PDF, question bank 9 to review worksheet: Electric field strength, attraction and repulsion, electric field concept, and forces in nucleus. Solve "Electromagnetic Induction Study Guide" PDF, question bank 10 to review worksheet: Electromagnetic induction, eddy currents, generators and

transformers, Faradays law, Lenz's law, and observing induction. Solve "Electromagnetism and Magnetic Field Study Guide" PDF, question bank 11 to review worksheet: Magnetic field, magnetic flux and density, magnetic force, electrical current, magnetic, electric and gravitational fields, and SI units relation. Solve "Electronics Study Guide" PDF, question bank 12 to review worksheet: Electronic sensing system, inverting amplifier in electronics, non-inverting amplifier, operational amplifier, and output devices. Solve "Forces, Vectors and Moments Study Guide" PDF, question bank 13 to review worksheet: Combine forces, turning effect of forces, center of gravity, torque of couple, and vector components. Solve "Gravitational Field Study Guide" PDF, question bank 14 to review worksheet: Gravitational field representation, gravitational field strength, gravitational potential energy, earth orbit, orbital period, and orbiting under gravity. Solve "Ideal Gas Study Guide" PDF, question bank 15 to review worksheet: Ideal gas equation, Boyle's law, gas measurement, gas particles, modeling gases, kinetic model, pressure, temperature, molecular kinetic energy, and temperature change. Solve "Kinematics Motion Study Guide" PDF, question bank 16 to review worksheet: Combining displacement velocity, displacement time graphs, distance and displacement, speed, and velocity. Solve "Kirchhoff's Laws Study Guide" PDF, question bank 17 to review worksheet: Kirchhoff's first law, Kirchhoff's second law, and resistor combinations. Solve "Matter and Materials Study Guide" PDF, question bank 18 to review worksheet: Compression and tensile force, elastic potential energy, metal density, pressure and measurement, and stretching materials. Solve "Mechanics and Properties of Matter Study Guide" PDF, question bank 19 to review worksheet: Dynamics, elasticity, mechanics of fluids, rigid body rotation, simple harmonic motion gravitation, surface tension, viscosity and friction, and Young's modulus. Solve "Medical Imaging Study Guide" PDF, question bank 20 to review worksheet: Echo sound, magnetic resonance imaging, nature and production of x-rays, ultrasound in medicine, ultrasound scanning, x-ray attenuation, and x-ray images. Solve "Momentum Study Guide" PDF, question bank 21 to review worksheet: Explosions and crash landings, inelastic collision, modelling collisions, perfectly elastic collision, two dimensional collision, and motion. Solve "Motion Dynamics Study Guide" PDF, question bank 22 to review worksheet: Acceleration calculations, acceleration formula, gravitational force, mass and inertia, mechanics of fluids, Newton's third law of motion, top speed, types of forces, and understanding units. Solve "Nuclear Physics Study Guide" PDF, question bank 23 to review worksheet: Nuclear physics, binding energy and stability, decay graphs, mass and energy, radioactive, and radioactivity decay. Solve "Oscillations Study Guide" PDF, question bank 24 to review worksheet: Damped oscillations, angular frequency, free and forced oscillations, observing oscillations, energy change in SHM, oscillatory motion, resonance, SHM equations, SHM graphics representation, simple harmonic motion gravitation. Solve "Physics Problems AS Level Study Guide" PDF, question bank 25 to review worksheet: A levels physics problems, energy transfers, internal resistance, percentage uncertainty, physics experiments, kinetic energy, power, potential dividers, precision, accuracy and errors, and value of uncertainty. Solve "Waves Study Guide" PDF, question bank

26 to review worksheet: Waves, electromagnetic waves, longitudinal electromagnetic radiation, transverse waves, orders of magnitude, wave energy, and wave speed. Solve "Quantum Physics Study Guide" PDF, question bank 27 to review worksheet: Electron energy, electron waves, light waves, line spectra, particles and waves modeling, photoelectric effect, photon energies, and spectra origin. Solve "Radioactivity Study Guide" PDF, question bank 28 to review worksheet: Radioactivity, radioactive substances, alpha particles and nucleus, atom model, families of particles, forces in nucleus, fundamental forces, fundamental particles, ionizing radiation, neutrinos, nucleons and electrons. Solve "Resistance and Resistivity Study Guide" PDF, question bank 29 to review worksheet: Resistance, resistivity, I-V graph of metallic conductor, Ohm's law, and temperature. Solve "Superposition of Waves Study Guide" PDF, question bank 30 to review worksheet: Principle of superposition of waves, diffraction grating and diffraction of waves, interference, and Young double slit experiment. Solve "Thermal Physics Study Guide" PDF, question bank 31 to review worksheet: Energy change calculations, energy changes, internal energy, and temperature. Solve "Work, Energy and Power Study Guide" PDF, question bank 32 to review worksheet: Work, energy, power, energy changes, energy transfers, gravitational potential energy, and transfer of energy.

Physical Systems Jan 23 2020 Based on the concept of a physical system, this book offers a new philosophical interpretation of classical mechanics and the Special Theory of Relativity. According to Belkind's view the role of physical theory is to describe the motions of the parts of a physical system in relation to the motions of the whole. This approach provides a new perspective into the foundations of physical theory, where motions of parts and wholes of physical systems are taken to be fundamental, prior to spacetime, material properties and laws of motion. He defends this claim with a constructive project, deriving basic aspects of classical theories from the motions of parts and wholes. This exciting project will challenge readers to reevaluate how they understand the structure of the physical world in which we live.

The Papers of Independent Authors, volume 28 Jan 03 2021

Building Theories Jun 08 2021 This book explores new findings on the long-neglected topic of theory construction and discovery, and challenges the orthodox, current division of scientific development into discrete stages: the stage of generation of new hypotheses; the stage of collection of relevant data; the stage of justification of possible theories; and the final stage of selection from among equally confirmed theories. The chapters, written by leading researchers, offer an interdisciplinary perspective on various aspects of the processes by which theories rationally should, and descriptively are, built. They address issues such as the role of problem-solving and heuristic reasoning in theory-building; how inferences and models shape the pursuit of scientific knowledge; the relation between problem-solving and scientific discovery; the relative values of the syntactic, semantic, and pragmatic view of theories in understanding theory construction; and the relation between ampliative inferences, heuristic reasoning, and models as a means for building new theories and knowledge. Through detailed arguments and examinations, the volume

collectively challenges the orthodox view's main tenets by characterizing the ways in which the different "stages" are logically, temporally, and psychologically intertwined. As a group, the chapters provide several attempts to answer long-standing questions about the possibility of a unified conceptual framework for building theories and formulating hypotheses.

On the Philosophy of Discovery, Chapters Historical and Critical Nov 20 2019 DigiCat Publishing presents to you this special edition of "On the Philosophy of Discovery, Chapters Historical and Critical" by William Whewell. DigiCat Publishing considers every written word to be a legacy of humankind. Every DigiCat book has been carefully reproduced for republishing in a new modern format. The books are available in print, as well as ebooks. DigiCat hopes you will treat this work with the acknowledgment and passion it deserves as a classic of world literature.

The Philosophy of the Inductive Sciences Oct 20 2019

The Divine Lawmaker Dec 02 2020 John Foster presents a clear and powerful discussion of a range of topics relating to our understanding of the universe: induction, laws of nature, and the existence of God. He begins by developing a solution to the problem of induction - a solution whose key idea is that the regularities in the workings of nature that have held in our experience hitherto are to be explained by appeal to the controlling influence of laws, as forms of natural necessity. His second line of argument focuses on the issue of what we should take such necessitatorial laws to be, and whether we can even make sense of them at all. Having considered and rejected various alternatives, Foster puts forward his own proposal: the obtaining of a law consists in the causal imposing of a regularity on the universe as a regularity. With this causal account of laws in place, he is now equipped to offer an argument for theism. His claim is that natural regularities call for explanation, and that, whatever explanatory role we may initially assign to laws, the only plausible ultimate explanation is in terms of the agency of God. Finally, he argues that, once we accept the existence of God, we need to think of him as creating the universe by a method which imposes regularities on it in the relevant law-yielding way. In this new perspective, the original nomological-explanatory solution to the problem of induction becomes a theological-explanatory solution. The Divine Lawmaker is bold and original in its approach, and rich in argument. The issues on which it focuses are among the most important in the whole epistemological and metaphysical spectrum.

A critical analysis of einstein's article: Apr 25 2020 In this article of 1918 , the only one on the paradox of the clocks, Einstein tries to set the clock out of sync, resorting to the "induction" that he introduced in the gravitational field with General Relativity. But this field does not exist and, however, the numbers do not add up properly.

The Papers of Independent Authors, volume 22 Feb 04 2021

The Material Theory of Induction Feb 16 2022 The fundamental burden of a theory of inductive inference is to determine which are the good inductive inferences or relations of inductive support and why it is that they are so. The traditional approach is modeled on that taken in accounts of deductive inference. It seeks universally applicable schemas or rules or a single formal device, such as

the probability calculus. After millennia of halting efforts, none of these approaches has been unequivocally successful and debates between approaches persist. The Material Theory of Induction identifies the source of these enduring problems in the assumption taken at the outset: that inductive inference can be accommodated by a single formal account with universal applicability. Instead, it argues that there is no single, universally applicable formal account. Rather, each domain has an inductive logic native to it. Which that is, and its extent, is determined by the facts prevailing in that domain. Paying close attention to how inductive inference is conducted in science and copiously illustrated with real-world examples, The Material Theory of Induction will initiate a new tradition in the analysis of inductive inference.

Gravitation and Inertia Oct 12 2021 Einstein's standard and battle-tested geometric theory of gravity--spacetime tells mass how to move and mass tells spacetime how to curve--is expounded in this book by Ignazio Ciufolini and John Wheeler. They give special attention to the theory's observational checks and to two of its consequences: the predicted existence of gravitomagnetism and the origin of inertia (local inertial frames) in Einstein's general relativity: inertia here arises from mass there. The authors explain the modern understanding of the link between gravitation and inertia in Einstein's theory, from the origin of inertia in some cosmological models of the universe, to the interpretation of the initial value formulation of Einstein's standard geometrodynamics; and from the devices and the methods used to determine the local inertial frames of reference, to the experiments used to detect and measure the "dragging of inertial frames of reference." In this book, Ciufolini and Wheeler emphasize present, past, and proposed tests of gravitational interaction, metric theories, and general relativity. They describe the numerous confirmations of the foundations of geometrodynamics and some proposed experiments, including space missions, to test some of its fundamental predictions--in particular gravitomagnetic field or "dragging of inertial frames" and gravitational waves.

WEVE-THEORY DISCOVERY OF THE CAUSE OF GRAVITATION Jun 20 2022 Nuclear Science Abstracts May 07 2021 NSA is a comprehensive collection of international nuclear science and technology literature for the period 1948 through 1976, pre-dating the prestigious INIS database, which began in 1970. NSA existed as a printed product (Volumes 1-33) initially, created by DOE's predecessor, the U.S. Atomic Energy Commission (AEC). NSA includes citations to scientific and technical reports from the AEC, the U.S. Energy Research and Development Administration and its contractors, plus other agencies and international organizations, universities, and industrial and research organizations. References to books, conference proceedings, papers, patents, dissertations, engineering drawings, and journal articles from worldwide sources are also included. Abstracts and full text are provided if available.

College Physics for AP® Courses Sep 11 2021 The College Physics for AP(R) Courses text is designed to engage students in their exploration of physics and help them apply these concepts to the Advanced Placement(R) test. This book is Learning List-approved for AP(R) Physics courses. The text and images in this book are grayscale.

William Whewell, D.D. ... Aug 10 2021

wave theory Jul 21 2022

Classical Field Theory Nov 13 2021 Scheck's successful textbook presents a comprehensive treatment, ideally suited for a one-semester course. The textbook describes Maxwell's equations first in their integral, directly testable form, then moves on to their local formulation. The first two chapters cover all essential properties of Maxwell's equations, including their symmetries and their covariance in a modern notation. Chapter 3 is devoted to Maxwell's theory as a classical field theory and to solutions of the wave equation. Chapter 4 deals with important applications of Maxwell's theory. It includes topical subjects such as metamaterials with negative refraction index and solutions of Helmholtz' equation in paraxial approximation relevant for the description of laser beams. Chapter 5 describes non-Abelian gauge theories from a classical, geometric point of view, in analogy to Maxwell's theory as a prototype, and culminates in an application to the $U(2)$ theory relevant for electroweak interactions. The last chapter 6 gives a concise summary of semi-Riemannian geometry as the framework for the classical field theory of gravitation. The chapter concludes with a discussion of the Schwarzschild solution of Einstein's equations and the classical tests of general relativity. The new concept of this edition presents the content divided into two tracks: the fast track for master's students, providing the essentials, and the intensive track for all wanting to get in depth knowledge of the field. Clearly labeled material and sections guide students through the preferred level of treatment. Numerous problems and worked examples will provide successful access to Classical Field Theory.

Leibniz and the English-Speaking World Dec 22 2019 This volume explores the attention awarded in the English-speaking world to German philosopher Gottfried Wilhelm Leibniz. Complete with an introductory overview, the book collects fourteen essays that consider Leibniz's connections with his English-speaking contemporaries and near contemporaries as well as the later reception of his thought in Anglo-American philosophy. It sheds new light on Leibniz's philosophy and that of his contemporaries.

Dinamic Gravity Induction Theory Oct 24 2022 The basic idea of DGIT is just to accept a simple assumption: Gravity is not limited to a central force, but also has a local dynamic inductive influence (DGI). The stiffness and the adherence of the Space-Time Continuum are the consequences of DGI. In DGI's presence all the energy systems (massive or not) have the same behaviour! In my opinion we choose to believe in the existence of some alleged Dark Matter, distributed exactly where we need it for confirming our equations. If it really exists, let it be! It will definitely become obvious when the Universe will decide. I agree: it might seem unexciting to use the same old equations as Newton did, and incommodious to suggest adjustments to Einstein's field equations. Well, I'm not a well-known physicist, and I'd rather have a plain explanation than a complicated theory.

Fundamental Principles, Formulated by Induction and Deduction and Eliminating All Theories and All Hypotheses from Science Aug 18 2019

Causality, Electromagnetic Induction, and Gravitation Dec 26 2022

Gravitation and Cogravitation Mar 25 2020 Newtons theory of gravitation is the

grandest and the most enduring physical theory ever created. Today, more than 300 years after it was first conceived, Newton's theory of gravitation is still the basic working theory of astronomers and of all the scientists dealing with space exploration and celestial mechanics. However, Newton's theory of gravitation has serious defects: it is incapable of accounting for certain fine details of planetary motion; it does not provide any information on the temporal aspect of gravitational interactions; it cannot be reconciled with the principle of causality and with the law of conservation of momentum when it is applied to time-dependent gravitational systems. This book extends and generalizes Newton's theory of gravitation, makes it free from the above defects, makes it fully applicable to all possible gravitational systems, and provides a large variety of methods for calculating gravitational interactions between moving or stationary bodies of all shapes, sizes and configurations. The starting point of the generalization of Newton's theory of gravitation developed in this book is the idea that gravitational interactions are mediated by two force fields: the gravitational field proper created by all masses and acting upon all masses, and the "cogravitational" field created by moving masses only and acting upon moving masses only. In accordance with the principle of causality, the two fields are represented by retarded field integrals, which, for static or slowly-varying gravitational systems, yield the ordinary Newtonian gravitational field. An immediate consequence of the generalized Newtonian theory of gravitation developed on this basis is that gravitational interactions normally involve at least five different forces associated with velocities, accelerations and rotations of interacting bodies. The effects of these forces are quite remarkable. Some examples: a fast-moving mass passing a spherically-symmetric body causes the latter to rotate; a mass moving with rapidly-decreasing velocity exerts both an attractive and a repulsive force on neighboring bodies; a rotating mass that is suddenly stopped causes neighboring bodies to rotate; the differential rotation of the Sun is caused by the planets orbiting around it. The generalized theory of gravitation is fully compatible with the laws of conservation of energy and momentum. A very important result of this compatibility is the definitive explanation of the process of conversion of gravitational field energy into the kinetic energy of bodies moving under the action of gravitational fields. The generalized theory of gravitation predicts the existence of gravitation-cogravitational waves and explains how such waves can be generated. The generalized theory of gravitation also indicates the existence of antigravitational (repulsive) fields and mass formations. A cosmological consequence of such fields and mass formations is a periodic expansion and contraction of the Universe. Another consequence is that the actual mass of the Universe may be much larger than the mass revealed by an analysis of gravitational attraction in the galaxies. It is natural to compare the various consequences of the generalized theory of gravitation with the consequences of the general relativity theory. In this regard the following three remarks should be made. First, there are no observable gravitational effects revealed by the general relativity theory that do not have their counterparts in the generalized theory of gravitation. Second, the generalized theory of gravitation describes a vastly larger number of

gravitational effects than those described by the general relativity theory. Third, numerical values for gravitational effects predicted by the general relativity theory are usually different from the corresponding values predicted by the generalized theory of gravitation; the difference is almost always a consequence of greater complexity and depth of gravitational interactions revealed by the generalized theory of gravitation. Although this book presents the results of original research, it is written in the style of a textbook and contains numerous illustrative examples demonstrating various applications of the generalized Newtonian theory of gravitation developed in the book.

Structural Depths of Indian Thought Sep 30 2020 "No other work treating Indian philosophy on a comparable scale contains the illuminating comparisons between doctrines of Indian schools and the thought of Western philosophy ranging from Plato to Sartre and Wittgenstein...It will, moreover, contribute to the understanding of Western philosophy by Indian thinkers and vice versa...Raju has an intimate acquaintance with a remarkable range of Western thinkers and this distinguishes his work from most of what has gone before...Raju, moreover, is himself a critical thinker and consequently, although he has written a history, he treats the ideas and doctrines in a philosophical mode and his assessments of positions are often original and illuminating." -- John E. Smith, Clark Professor of Philosophy, Yale University "Purpose: To deal with Indian philosophy in a fashion reflecting the way the best German historians of philosophy deal with Western philosophy...The book is remarkable for its comprehensiveness in combination with extensive critical discussions...Raju's book...is more critical than Radhakrishnan's and more philosophical than Dasgupta's. Radhakrishnan's comments are far less philosophically sophisticated and interesting than Raju's....a monument to a senior Indian philosopher's lifelong study and thoughtful critical consideration of the great classical systems of his tradition." -- Karl H. Potter, Professor of Philosophy, University of Washington "Raju's credentials are impeccable. He is one of the few scholars in the world who could presume to write a major work on Indian thought. Accordingly, his knowledge of the Indian schools is accurate and impressive. To the extent that one of his intentions is to cast those schools in terms which make them more intelligible to western readers, his work measures up very well." -- Harold H. Oliver, Professor of Philosophy, Boston University

Gravitation, Inertia and Weightlessness Dec 14 2021 This work discusses the problem of physical meaning of the three main dynamical properties of matter motion, namely gravitation, inertia and weightlessness. It considers that Newtonian gravitation and Galileo's inertia are the centrifugal effects of interaction energy of a self-gravitating n-body system and its potential field. A self-gravitating celestial body appears to be an excellent natural centrifuge that is rotated by the energy of interacting elementary particles. Weightlessness is a consequence of the centrifugal effect of elementary particles interaction that appears at differentiation of a body matter with respect to density. The author analyzes the problem of creation of mass particles and elements from the elementary particles of "dark matter", and discusses the basic physics of the Jacobi dynamics from the viewpoint of quantum gravitation. Chapters assert that

the fundamentals of Jacobi dynamics completely correspond to conditions of natural centrifuges. The centrifuge is an excellent experimental model for the study of dynamical effects in solving the many body problem. In this book, readers may follow the demonstration of some of those studies and follow derivations, solutions and conclusions that provide a solid basis for further research in celestial mechanics, geophysics, astrophysics, geo- and planetary sciences.

The Logical Leap Jul 29 2020 A groundbreaking solution to the problem of induction, based on Ayn Rand's theory of concepts. Inspired by and expanding on a series of lectures presented by Leonard Peikoff, David Harriman presents a fascinating answer to the problem of induction-the epistemological question of how we can know the truth of inductive generalizations. Ayn Rand presented her revolutionary theory of concepts in her book Introduction to Objectivist Epistemology. As Dr. Peikoff subsequently explored the concept of induction, he sought out David Harriman, a physicist who had taught philosophy, for his expert knowledge of the scientific discovery process. Here, Harriman presents the result of a collaboration between scientist and philosopher. Beginning with a detailed discussion of the role of mathematics and experimentation in validating generalizations in physics-looking closely at the reasoning of scientists such as Galileo, Kepler, Newton, Lavoisier, and Maxwell-Harriman skillfully argues that the inductive method used in philosophy is in principle indistinguishable from the method used in physics.

Dusty and Self-Gravitational Plasmas in Space Aug 30 2020 The diverse and often surprising new facts about planetary rings and comet environments that were reported by the interplanetary missions of late 1970s - 1980s stimulated investigations of the so-called dusty plasma. The number of scientific papers on the subject that have been published since is quite impressive. Recently, a few surveys and special journal issues have appeared. Time has come to integrate some of the knowledge in a book. Apparently, this is the first monograph on dusty and self-gravitational plasmas. While the circle of pertinent problems is rather clearly defined, not all of them are equally represented here. The authors have concentrated on cooperative phenomena (Le. waves and instabilities) in the dusty plasma and the effects of self-gravitation. At the same time, in an attempt to present the vast material consistently, we have included such topics as electrostatics of the dusty plasma and gravitoelectrodynamics of individual charged particles. Also mentioned are astrophysical implications, mostly concerning planetary rings. We hope that the book shall be of interest and value both to specialists and those (astro)physicists who have just discovered this area of plasma physics. We are thankful to many scientists actively working in the field of dusty plasma physics who have generously let us become acquainted with their results, sometimes prior to publication of their own papers: U. de Angelis, N. D'Angelo, o. Havnes, A. Mendis, M. Rosenberg, P. Shukla, F. Verheest, and E. Wollman.

Electricity and Magnetism Aug 22 2022

staging-api-batiment.wamland.com