

DOWNLOAD PDF THE GRAND UNIFIED THEORY OF CLASSICAL PHYSICS

Chapter 1 : The Grand Unified Theory of Classical Physics by Randell L. Mills

A must read for every student of physics and chemistry, Dr. Mills' edition of his Grand Unified Theory strengthens its claim as the only viable successor to the incumbent Randell Mills and the Search for Hydrino Energy Read more.

It has been self-published because the author has not been successful at getting it accepted by reviewed scientific journals. He has, however, been able to attract millions of dollars in venture capital to fund his company. To say this work is "far out" is an understatement. Mills claims that quantum mechanics is bogus. He does not believe that matter has a probability wave function associated with it. He does not believe in entanglement. He further claims to show how much of the experimental evidence that has been explained by use of quantum mechanics can be explained through classical physics. His development of classical physics leads him to lower energy states of hydrogen than that conventionally predicted. He claims to have invented a highly efficient means of producing energy through inducing hydrogen atoms to give up energy and transition into these lower energy states. The release of this energy supposedly produces energy efficiently with no undesirable byproducts. His theory further leads to a fifth force capable of producing an anti-gravity beam that could be used to propel rockets far more efficiently than conventional fuels. I have seen several physics treatments that defy conventional wisdom that, on a casual examination, reveal themselves to be either not sound or hand waving. His tome is replete with mathematical equations. Because this work was recommended to me by a scientist who is a former colleague, and because the work stands up to an initial "crackpot" test, I went over the whole work--certainly not all in detail but enough to get a flavor and to test selected parts for accuracy. The book is sorely in need of editing. It has obviously been pasted together from shorter works and not edited for redundancies. It gives excruciating detail on the mathematics but relatively little enlightenment on the physics behind the results. I remain a skeptic, i. It is interesting enough because of its implications, and believable enough because of its mathematical rigor, that I have not rejected it. I intend to further investigate the scientific literature to learn more about why he has been rejected by the scientific journals.

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Chapter 2 : BrilliantLightPower Wiki | FANDOM powered by Wikia

Dr. Mills has advanced the field generally known as Quantum Mechanics by deriving a new atomic theory-The Grand Unified Theory of Classical Physics (GUT-CP)-from first principles, which unifies Maxwell's Equations, Newton's Laws, and Einstein's General and Special Relativity.

The argument for the sec unit is explained in Chapter 32 and is tied to the fundamental notion that gravity arises as the relativistic correction to the dilation of space as energy is converted into matter. Again, I urge you to take acquaint yourself with the non-radiation condition. It was developed independently by two researchers, most notably H. Haus under whom Mills studied and collaborated with at MIT. It says that rather than acceleration being responsible for radiation, instead an ensemble of current density must possess Fourier components synchronous with light speed. This is a remarkable result. And indeed, when you do so, you find that this particular ensemble has physical characteristic that match exactly those observed in the bound electron through experiment. Can you say that about QM? Even more, QM utterly fails to predict the physical characteristics of any of the higher order atoms, ions and molecules. In it, all the ionization energies for the 1 through 20 electron ions are solved exactly. Feynman famously quipped that all physicists worthy of the name should put the on their wall and worry about it. The fine structure constant is the ratio to the Bohr radius of a perfect spherical resonator cavity in free space with a harmonic frequency that exactly matches the photon with rest mass equal to the electron. What does that mean? Think of free space with its vacuum permittivity and permissivity as an LC circuit in which an electromagnetic wave packet is propagating. The rest is easy. Anything to do with Schrodinger or Heisenberg. I stand by exactly what I said before. Or is it a meaningless coincidence? How do you answer that question? How do you think Mills answers that question? Would you tolerate a student coming to you to complain that the math for the curl operator must be wrong but they have never bothered to learn how a vector works? I already provided two glaring examples. Second, I can calculate in simple closed form equations all of the ionization energies for any ion with 1 to 20 electrons. I will send you my spreadsheet if you are interested. I submit that such a calculation is not possible under QM " and if it is, I would very much like to see it. I explained why it is in fact definitely a coincidence, I am merely asking you to read what I wrote and reply to it. If a student opened her course textbook to a random page and found a statement which was absurd nonsense, and pointed that out to me, I would not shake my finger at her and say she ought to read every single word of the book before she comes and bothers me! I would read the statement and discuss whether or not it was in fact absurd nonsense, and if I agree with her, I would thank her for her important discovery, send the class and author an erratum note, and I would immediately start being a lot more suspicious about every other statement in the textbook. I am being that student. No I did not read every page of the book, and I cannot say for sure that there is no kernels of truth or insight anywhere in the book. Instead, what I did was carefully read certain sections from the book, and found that those sections had no kernels of truth or insight. If you read what I wrote in the blog post, I did in fact add that caveat: String theory may someday predict it from scratch, but no one has figured out how to do those calculations yet. Even if he did have an actual postdiction of the electron mass and spin, I would weigh that unfavorably against the crowning achievements of mainstream quantum mechanics such as those listed here. Ionization energies are indeed predictable from quantum mechanics, but if you want to be really really accurate, the math is very complicated, and certainly not what you can implement in a spreadsheet. See here or many other places. Should we care that the exact calculation is too complicated for a spreadsheet? The goal in physics is to start with a few self-contained and universally-applicable assumptions, and apply them following strict and completely inflexible rules, and wind up concluding lots of true facts about the world. This is just like math: How complicated is it to get from the axioms of Zermelo-Fraenkel set theory to the classification of finite simple groups? Probably it would take tens of millions of pages if we wrote out all the steps starting from the axioms. Does that provide evidence that Zermelo-Fraenkel set theory is wrong and that we should be

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searching for different axioms? No, not at all, it just means that doing math can be hard sometimes. Maybe there are reasons to use other axioms besides ZF, but this is not one of them. Because I think that example demonstrates quite clearly how a purely classical approach to a Gedanken can produce an amazing insight. What Feynman missed was that α is the critical dimension of the spherical resonator cavity that can show infinite impedance to the kEV photon! Peter Wolstenholme at 2: Kaz was being a bit over-optimistic there. I am fairly sure that convincing devices will be revealed during , or perhaps sooner, even though it could take a while to see real commercialisation. A century ago It was accepted that automobiles kept breaking down but this seems unacceptable for new products, except for software, these days.

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Chapter 3 : Grand Unified Theory of Classical Physics - Wikiversity

The Grand Unified Theory of Classical Physics 19 Replies Randell L. Mills is the founder of Brilliant Light Power (previously called BlackLight Power), a company trying to generate useful energy by catalyzing transitions of hydrogen into the "hydrino state", i.e. an alleged state of hydrogen with a lower energy than the 1s state.

Model of the Hydrogen Atom The electron is a spherical shell centered on the nucleus. Mills sought to construct a model of the hydrogen atom that is consistent with classical physical laws. To do so, he models the bound electron as a spherical shell of charge, centered on the nucleus, and nonradiative according to the Haus condition. This is called the orbitsphere, and is analogous to a soap bubble. Unlike a rigid spinning sphere, the orbitsphere is composed of a continuous infinite distribution of great-circle current loops that produce two angular momentum vectors that give rise to the phenomenon of electron spin. An approximation of this current pattern is pictured to the top, left. As a whole, the orbitsphere is a very thin superconducting surface of uniform mass and charge density. In the hydrogen atom, each current loop is subject to the following force balance equation: $B \cdot I \cdot r = H \cdot r$. According to Mills, the orbitsphere acts as a dynamic resonator cavity, expanding and contracting as it absorbs and emits discrete frequencies of light. This classical resonance effect gives rise to quantization. Excited states produce charge-density waves that are spherical harmonics and propagate around the z-axis [Click here to view an animation](#). In multi-electron atoms, these harmonics correspond to p, d, f atomic orbitals. In an excited state, the trapped photon produces a radial dipole moment that is radiative according to the Haus condition, so excited states have short lifetimes and quickly decay. During the formation of an excited state, the correspondence principle holds: The predicted energies, Lamb shift, fine structure splitting, hyperfine structure, resonant line shape, line width, selection rules, etc. **Hydrino States of Hydrogen** In addition to excited states, Mills model predicts the existence of energy states of hydrogen below the traditional ground state. Binding energies are given by: $E_n = -13.6 \text{ eV} \cdot n^{-2}$. This is an example of nonradiative energy transfer caused by multipole coupling between the hydrogen atom and the catalyst, and is similar to what occurs between phosphor ions in fluorescent lamps. Or, in a process called disproportionation, hydrinos may catalyze the formation of more hydrinos. In this medium, absorbed photons cause the electron to shrink under the electric force provided by the trapped photon. When a magnetic field is applied, the electrons migrate through the liquid at rates corresponding to their radius. For experimental results, see [2].

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Chapter 4 : Randell L. Mills (Author of The Grand Unified Theory of Classical Physics)

A Grand Unified Theory (GUT) is a model in particle physics in which, at high energy, the three gauge interactions of the Standard Model which define the electromagnetic, weak, and strong interactions, or forces, are merged into one single force.

GUTCP Fact Sheet The Grand Unified Theory of Classical Physics describes all physical processes and phenomena in the universe, from the scale of quarks to the Cosmos, using only classical formulas describing the propagation of electromagnetic waves, gravity and relativity, together with simple, well-known physical constants. Starting with the well-known classical laws, elegant and self-consistent formulas can be derived for everything from the energy levels of molecules to the accelerating expansion of the universe. He was provided with a draft paper by his then Electrical Engineering Professor, Hermann Haus that provided the proof of a classical basis for the radiation observed from electrons from the free electron laser. For such a model to be consistent, physical and conform to observation, the electron had to be an extended, two dimensional, indivisible membrane composed of negatively charged current loops that, when captured by the charge of a proton, could alter its shape to fully enclose the proton in what Mills termed an "orbitsphere". The proton and surrounding electron orbitsphere form a dynamic resonator cavity that is stable once the positive field of the proton is balanced by the mass, charge, angular momentum, and kinetic energy of the electron orbitsphere. Like any resonator cavity, the orbitsphere is able to capture photons of discrete energies, which is the physical basis for quantization, and once captured, the intrinsic electric fields of such photons alter the the force balance that exists between the proton and electron. Although Quantum Mechanics does not account for the role of the photon inside the atom nor properly explain the kinetic energy and spin of a bound electron, it is the combination of the properties of the nucleus, electron orbitsphere and the trapped photon that determines the radius of the electron shell and its ionization energies. Photons contain inertial mass and electric fields. In the case of excited states where the atom absorbs photons, the physical radius of the electron orbitsphere will increase by 2, 3, 4 etc. These excited states are fractional and therefore unstable and will radiate back to the first stable state with an integer field. The radius of a free electron disc is dependent on its velocity, and acceleration of a free electron disc to very high speeds in particle accelerators reduces its radius such that an electron may appear point-like in such experiments despite its extended two dimensional structure. Mills also proposes that the properties of electrons in superfluid helium are experimental proof of its extended nature, with the free electrons forming spherical orbitspheres that do not contain a nucleus in the gaps between the helium atoms. It is important to note that QM, or any other theory, cannot accurately calculate the ionization energies of anything other than hydrogen and has no explanation for what spin actually is. In contrast Mills has used GUTCP to calculate the ionization energies of complex atoms containing up to 20 electrons using only fundamental constants and integer values that closely matches the experimental data. This amazing feat which is powerful proof of the utility of the theory has been simply glossed over by critics, who claim that the Heisenberg Uncertainty Principle of Quantum Mechanics means Mills could not do what he has actually done. The refusal to engage with Mills as well as hostile pronouncements against the Company, including some by Nobel prize winners who cannot accept that QM is wrong or incomplete, has been touted by some as proof that GUTCP is not correct. However that view is not supported by any objective scientific evidence in counterbalance to the experimental evidence that Mills has accumulated. In practice it has merely meant that BrLP has had no support or assistance in the development of its technology for over 25 years. The Nature of Gravity Edit The two dimensional nature of fundamental particles also explains the atomic origin of gravity. It is the positive curvature of fundamental particles bound in matter like quarks and electrons that give rise to a gravitational field. Experimental observations by Witteborn et al that the free electron appeared to have no gravitational mass were simply explained away by the author as a counterbalancing "sag" of electrons in the metallic shielding. The theory also raises the possibility of creating negative curvature of fundamental

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particles like electrons which can be bound into a state that is repelled by a gravitational field- what the theory calls a pseudoelectron. It is suggested by Mills that negatively curved electron currents may also manifest in nature as vertical electron currents observed above thunderstorms, in the massive electron jets expelled from the poles and gravity wells of Black holes and possibly in electron beams arising from energetic processes in the Sun. Mills proposes that predicted pseudoelectrons could be experimentally derived and measured by free state electrons binding gamma photons in a gravitational field or alternatively colliding relativistic beams of electrons with specific ions that result in the formation of pseudoelectrons during which mass, energy and gravitational potential energy are all conserved. A definitive experiment to prove the viability of this particular prediction of the theory remains to be publicly demonstrated. If proved correct, such technology would be transformational to the aerospace industry and exploration of the solar system which remains elusive and unsafe due to the limitations of conventional rocketry. Mills has filed patent applications on the means of generating pseudoelectrons and their application in aerospace craft. Prediction of Hydrino States Edit The model has attracted most attention for its claim that what Quantum Mechanics postulates as the "ground state" is not the lowest energy state of hydrogen. While the electron orbitsphere of the ground state of hydrogen is stable and cannot emit light to get closer to the proton, it was predicted by Mills that atoms, ions or molecules that can ionise or disassociate on receipt of a specific resonant energy transfer from atomic hydrogen could serve to remove energy contained in the electric fields of the proton and electron. While an excited state of hydrogen is formed by absorbing an external photon which superimposes and reduces the central field of the proton via its intrinsic electric field causing an increase in the radius of the electron orbitsphere, the loss of energy from the "ground state" orbitsphere by a resonant transfer process results in a different type of trapped photon. This trapped photon has an intrinsic electric field that superimposes and ADDS an integer value to the central field of the proton. A simpler way to think of the process is that the resonant transfer of energy to the catalyst subtracts a negative component of energy from the electron orbitsphere of the H atom resulting in an integer increase to the positive component of the central field. It is also likely to be the cause of solar flares, as re-connection between solar magnetic fields containing protons and electrons, form pinched high density pockets of hydrogen that can act as multi-body catalysts, forming transient high energy pockets of expanding plasma that can burst the containing fields and eject solar material into space. Hydrino transitions can be effected only by resonance between catalyst atoms, ions or molecules with ionization and dis-associative energies that equal integer multiples of The removal of exactly Integer multiples of Force balance is again reached when the collapsed hydrogen atom forms what Mills terms a hydrino state, which is both stable to radiation and cannot absorb or emit radiation OTHER than as it moves between hydrino states. Mills proposes that such hydrino states are the identity of dark matter , and their transitions occur in the Sun as the transient but highly energetic source of coronal heating that causes solar flares and coronal mass ejections. Hydrino transition spectral lines also occur in the interstellar medium and can be detected from galaxies, including lines that defy identification with known emission lines but which match predicted hydrino lines. Mills predicts that there are hydrino states with the physical radius of each state being the ground state radius divided by the hydrino number of 2 to Quantum Mechanics expressly forbids the existence of such hydrino states. Thus if such states exist, Quantum Mechanics will be demonstrated to be completely wrong. Mills conducted hundreds of experiments prior to applying for the first patent on his claims on 21 April and has continued to expand upon his original findings and claims to the present day, publishing his findings in peer reviewed journals and developing a company, Brilliant Light Power, to commercialize the production of energy given off by hydrino transitions, which is much greater than chemical energies and therefore represents a new and powerful source of energy not dependent on the extraction of fossil fuels. Although the energy given off in the formation of hydrinos is much less than nuclear energy, it is much greater than chemical energy and may be non-polluting, safe and be obtained cheaply from the environment. In , in conjunction with his former Chemistry Professor John J Farrell, he published the first edition of the Grand Unified Theory containing pages. Further development of the Theory has expanded in detail upon such matters as the

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interconversion of matter and energy and its relationship to spacetime expansion and contraction, the origins of gravity at the atomic level based on the curvature of fundamental particles, accurately calculating the energy of formation of molecules based on orbitalsphere interactions, predicting in the accelerating expansion of the Universe before it was experimentally proved in , hydrinos as the identity of dark matter, the identification of hydrino transition lines from the sun, galaxies and interstellar medium. Water as the source for atomic hydrogen for hydrino transitions Edit The Theory predicts that a single water molecule acts as a hydrino inducing catalyst. This energy is a close match to However water very easily forms hydrogen bonds with other water molecules and such additional bonds prevent the matching resonance. Accordingly to act as an effective catalyst, nascent or an isolated water molecule must be formed in situ to permit the hydrino resonance to occur. Water therefore can act both as fuel and catalyst with a liter of water projected to have the same energy producing potential as liters of high octane gasoline. If correct, the Earth has a virtually unlimited source of energy in its oceans that can be tapped cheaply and without pollution for billions of years. Mills claims that the total energy that is produced by a hydrino transition is set out by the following formula where p is the original hydrino state from 1 to and m is the integer multiple of The total amount of energy released by this transition is: These characteristic continuum radiation signatures of hydrinos from astronomical sources may be mistaken for the signatures of larger nuclei as they first capture a single electron "Hydrogen like atoms" due to matching continuum radiation energies and possibly detectable due to the presence of unexpected atom or ion densities and temperatures at celestial locations better explained by hydrino transitions. Mills has provided samples containing hydrino compounds to third parties for analytical testing and moreover has developed numerous tests using standard lab equipment to detect and categorize hydrinos in physical compounds with obvious differences from ordinary matter due to the increased binding energy of hydrinos. He has produced numerous experiments where repeatable laboratory conditions show spectral lines and continuum radiation matching the hydrino transmissions predicted by the Theory. As a result extremely high density energy was repeatedly observed in single detonations of solid fuels. In order to produce a continuously operating electrical generator, the Company began building and testing designs to enable the formation and continual detonation of solid fuels that could be repeatedly recycled. First Generation Suncell Design This design worked by continually feeding a conducting powder hydrated with water between rotating, conducting gears that act as electrodes. A low voltage but very high amp current was induced through the hydrated powder contained between the interlocking teeth of the gears which initiated hydrino transitions in a reaction between atomic H and the water. In contrast, to simply produce hydrogen from water by inputting energy by electrolysis requires 1. In addition to electrically detonating the hydrated powder and forming hydrinos, the high current provided a source of electrons that prevented the inhibition of the hydrino reaction caused by the increase of positive ions that distort the resonance between H and H Self inhibition of the reaction was a major cause of the lower power density of earlier models that precluded earlier commercialization. The ions recapture electrons and the conducting powder is reformed and re-hydrated by the addition of water before it is recirculated back between the gears to be detonated again. As a result, common, off the shelf photovoltaic cells were considered to convert the intense light directly into electricity using partially transparent mirrors to split the light into intensities capable of being handled by commercially available concentrator photovoltaic cells. By using gears with 60 teeth rotating at rpm, it was hypothesized that the total power produced would equal times the average energy produced per ignition. In February Dr. It will take a little more patience to achieve a commercial device. A lot of technology had to be invented and developed. There will be more to come. We are a small private company taking on a challenge that even nations could not achieve. We will be successful. Mills indicated that the technology had evolved beyond the rotating gear model: Currently it has no moving parts with systems that should last at least 10 to 20 years before replacement with minimum maintenance required. This design should not require years of field tests and redesign. Our plan is to have tested commercial-ready technology before announcing it to the market. Concurrent with the announcement, diagrams of the current version of SunCell™ with photos and videos,

were posted on the Brilliant Light Power website. Second Generation Suncell Design Changes to early designs include abandoning the rotating gears in favor of an electromagnetic pump with no mechanically moving parts. This introduced the conducting molten metals copper and silver into the reactor chamber between two tungsten electrodes. Water vapor was injected into the reaction chamber, and a low voltage high current arc initiated the hydrino transition reactions wherein the molten metals were vaporized and the silver vapor absorbed the UV and EUV light from hydrino transitions to create a black body radiator at K. Instead of using the light from the plasma directly for electricity generation, the design was changed to a Thermovoltaic system, in which the energy from the hydrino transitions was used to heat the reactor walls. The reactor chamber was spherically redesigned and fully contained within an enclosed tungsten sphere which absorbs the energy of the plasma and re-radiates it as light from a black body radiator at K. It was intended that the consistent wavelengths from the tungsten radiator at those temperatures would be matched to off the shelf water cooled concentrator photovoltaic cells cPVs fixed to an outer shell that will efficiently convert the emitted wavelengths directly to electricity. A slow motion video of a prototype gravity fed Suncell reaction chamber was posted to a Brilliant Light Power Vimeo account in January. It shows continual ignition of the molten metals, the production of the silver vapour followed by intensely brilliant light production as the silver vapor cloud absorbs the UV and EUV light produced by the hydrino transitions. A further video demonstration was held on 28 June to outline further developments and refinements to the design arising from a new approach in May. An additional change was that hydrogen gas was introduced directly into the SunCell™ instead of water and that the molten silver contained an extremely stable oxide identified as LiVO_3 which is reduced inside the reactor by the hydrogen gas to form the H_2O catalyst. Other oxides were said to work very well whereas others did not. The oxide recycles when oxygen is released during hydrino reactions that disassociate the H_2O molecule. These appear to be test modules composed of molybdenum shielding with a melting point of K which show holes vaporized at the point of reaction as well as vaporization of internal tungsten electrodes. Final designs were said to utilize tungsten shielding melting point K with the reactions confined to a tungsten sphere which will be heated to degrees. As occurs in tungsten filament light bulbs, halide gas would be intended to separate the sphere from the cPV modules to prevent excessive evaporation of the tungsten over prolonged operation. Other possibilities mentioned were to use materials that reflect unusable wavelengths while permitting wavelengths that can be converted to electricity through to the water cooled cPV cells that are arranged in triangular units to form a geodesic dome. Following queries by critics as to what the high power claimed by BrLP actually meant, on 24 July Dr. Mills directly commented on the capabilities of the then SunCell design: The minimum energy input in Joules to heat the reactor and silver and melt the silver to start the reaction is 1 MJ. There is no energy storage mechanism. This energy is conserved as heat that is returned as output as the system cools to room temperature.

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Chapter 5 : The Grand Unified Theory of Classical Physics | Is there a plausible theory of cold fusion?

Dr. Mills has built on the field generally known as Quantum Mechanics by deriving a new classical physical atomic theory from first principles, the Grand Unified Theory of Classical Physics (GUT-CP) which unifies Maxwell's Equations, Newton's Laws, and Einstein's General and Special Relativity.

Forces[edit] All four of the known fundamental forces are mediated by fields, which in the Standard Model of particle physics result from exchange of gauge bosons. Specifically the four fundamental interactions to be unified are: The exchange particle that mediates this force is the gluon. The photon is the exchange particle for this force. It is mediated by the W and Z bosons. The postulated exchange particle has been named the graviton. Modern unified field theory attempts to bring these four interactions together into a single framework. Classic theory[edit] The first successful classical unified field theory was developed by James Clerk Maxwell. Until then, electricity and magnetism had been thought of as unrelated phenomena. In 1865, Maxwell published his famous paper on a dynamical theory of the electromagnetic field. This was the first example of a theory that was able to encompass previously separate field theories namely electricity and magnetism to provide a unifying theory of electromagnetism. In the years following the creation of the general theory, a large number of physicists and mathematicians enthusiastically participated in the attempt to unify the then-known fundamental interactions. In Kaluza's Klein theory, the gravitational curvature of the extra spatial direction behaves as an additional force similar to electromagnetism. These and other models of electromagnetism and gravity were pursued by Albert Einstein in his attempts at a classical unified field theory. This system is heuristically the super-classical [Varadarajan] limit of the not mathematically well-defined quantum electrodynamics. One can extend this system to include the weak and strong nuclear forces to get the Einstein-Yang-Mills-Dirac System. The French physicist Marie-Antoinette Tonnelat published a paper in the early 1950s on the standard commutation relations for the quantized spin-2 field. In the 1960s Mendel Sachs proposed a generally covariant field theory that did not require recourse to renormalisation or perturbation theory. In 1962, Tonnelat published a book on the state of research on unified field theories. Modern progress[edit] In 1961 American physicist Sheldon Glashow proposed that the weak nuclear force, electricity and magnetism could arise from a partially unified electroweak theory. This unified theory modeled the electroweak interaction as a force mediated by four particles: As a result of the spontaneous symmetry breaking, the weak force becomes short-range and the W and Z bosons acquire masses of 80 GeV. Their theory was first given experimental support by the discovery of weak neutral currents in 1973. Carlo Rubbia and Simon van der Meer received the Prize in Physics in 1984. In 1976, Sheldon Glashow and Howard Georgi proposed unifying the strong and electroweak interactions into the Georgi-Glashow model, the first Grand Unified Theory, which would have observable effects for energies much above 10¹⁶ GeV. Since then there have been several proposals for Grand Unified Theories, e.g. A major problem for experimental tests of such theories is the energy scale involved, which is well beyond the reach of current accelerators. Grand Unified Theories make predictions for the relative strengths of the strong, weak, and electromagnetic forces, and in 1983 LEP determined that supersymmetric theories have the correct ratio of couplings for a Georgi-Glashow Grand Unified Theory. Many Grand Unified Theories but not Pati-Salam predict that the proton can decay, and if this were to be seen, details of the decay products could give hints at more aspects of the Grand Unified Theory. It is at present unknown if the proton can decay, although experiments have determined a lower bound of 10³² years for its lifetime. Current status[edit] Theoretical physicists have not yet formulated a widely accepted, consistent theory that combines general relativity and quantum mechanics to form a theory of everything. Trying to combine the graviton with the strong and electroweak interactions leads to fundamental difficulties and the resulting theory is not renormalizable. The incompatibility of the two theories remains an outstanding problem in the field of physics.

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Chapter 6 : Download the GUT-CQM

A theory of physics that is an alternative to the currently accepted quantum mechanics. It postulates the existence of fractional quantum states of the hydrogen atom, named "hydrinos", that are a lower energy state of hydrogen than that currently accepted as the ground state. It postulates that.

Chapter 7 : Society for Classical Physics - Google+

A must read for every student of physics and chemistry, Dr. Mills' edition of his Grand Unified Theory strengthens its claim as the only viable successor to the incumbent theory of Quantum Mechanics (QM).

Chapter 8 : The Particle Adventure | Unsolved Mysteries | Forces and the Grand Unified Theory

The Grand Unified Theory of Classical Physics describes a framework that integrates classical laws of motion and electro-dynamics with gravity, relativity, and certain quantum effects. Its laws apply consistently across 85 orders of magnitude, from the sub-atomic and quarks to the cosmos. The theory.

Chapter 9 : Randell Mills - RationalWiki

Classical Physics (CP) model of the structure of the electron and the photon used to solve atoms and their states and the subsequent closed-form solutions of the fundamental experiments of atomic physics.