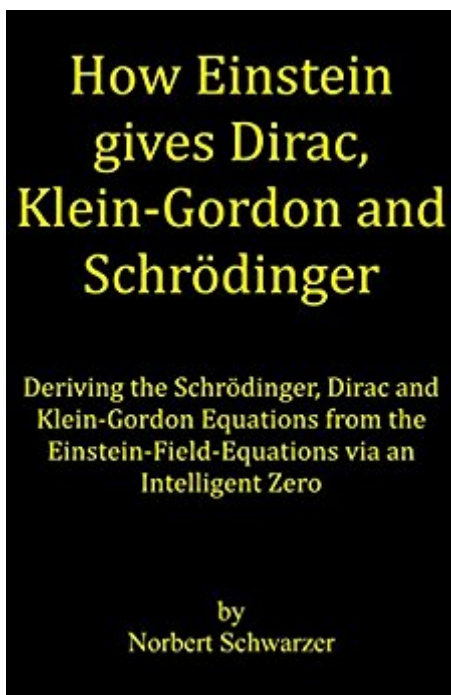




The book was found

# How Einstein Gives Dirac, Klein-Gordon And Schrödinger: Deriving The Schrödinger, Dirac And Klein-Gordon Equations From The Einstein-Field-Equations Via An Intelligent Zero



## Synopsis

Taking the line element of any Einstein-compatible metric and quantizing it, thereby applying the method of the intelligent zero gives metric Dirac, Klein-Gordon and Schrödinger equations. One might therefore consider the new equations as the Dirac-, Klein-Gordon- or Schrödinger-forms of the General Theory of Relativity. It will be shown that what classically is the potential  $V$ , gives a metric distortion in the theory of quantized metric space-solutions. The connection will be derived in this paper by the means of the Einstein-compatible Schrödinger equation. As an example, we will also derive the Klein-Gordon or Quantum Equation for a Schwarzschild-object. Even though it will not be solved in this paper, some interesting conclusions can be extracted from the structure of that equation. By applying the usual separation approach one can easily solve the angular and the time-part of the equation, but faces problems with respect to the radial part. As expected one obtains the classical Klein-Gordon equation for zero-Schwarzschild radii. The solutions are slightly similar to those of the Hydrogen-Atom in classical Quantum Theory. Thus, the metric Klein-Gordon equation as derived here applied to the Schwarzschild metric and its brother the corresponding metric Dirac equation might be considered the Quantum Gravity equations in the case of spatial symmetry of revolution. One obtains all classically known quantum results in the case of bigger radii measured in units of the Schwarzschild radius  $R_s$ . Quantum Gravity corrections kick in for  $r$  being in the order of  $R_s$ . In this case, however, we will also find that spatial spherical coordinates are not suitable and have to be replaced by isotropic ones. In addition and in connection with the metric Dirac-solutions as well as the interpretation in connection with the distortion of space and time given here, we can now understand the whole quantum theoretical jitter just as jitter of space-time itself. "Jitter-concentrations" appear as particles and virtual parameters, as introduced to our intelligent zero, account for the "background quantum" or "vacuum quantum field". The space-time jitter itself provides the reason for the principal quantum uncertainty and the probability to find certain jitter-patterns as particles inside a certain sector of space. This of course is a bit different to the classical probability interpretation of the wave function of Born, but in essence, it is almost the same. In the opinion of this author, either having a space-time of wavy character and providing the necessary oscillations for our particles plus the jitter to make them hop around, or letting a probability function do this job, does not seem to be much of a difference. Only, so the author thinks, the jittering space-time picture gives a more figurative understanding where this all does come from.

## Book Information

File Size: 1395 KB

Publication Date: June 9, 2017

Sold by: Digital Services LLC

Language: English

ASIN: B071K2Y4V2

Text-to-Speech: Enabled

X-Ray: Not Enabled

Word Wise: Not Enabled

Lending: Not Enabled

Enhanced Typesetting: Not Enabled

Best Sellers Rank: #510,240 Paid in Kindle Store (See Top 100 Paid in Kindle Store) #37

in Kindle Store > Kindle eBooks > Nonfiction > Science > Physics > Gravity #116 in Books >

Science & Math > Physics > Gravity #191 in Kindle Store > Kindle eBooks > Nonfiction > Science

> Physics > Quantum Theory

[Download to continue reading...](#)

How Einstein gives Dirac, Klein-Gordon and Schrödinger: Deriving the Schrödinger, Dirac and Klein-Gordon Equations from the Einstein-Field-Equations via an Intelligent Zero Trekking in the Dolomites: Alta Via 1 And Alta Via 2 With Alta Via Routes 3-6 In Outline (Cicerone Guides) A World of Three Zeros: The New Economics of Zero Poverty, Zero Unemployment, and Zero Net Carbon Emissions Einstein Already had it, But He Did not See it: Part 0: The Discarded Term from the Einstein-Hilbert-Action (Einstein had it Book 1) Trekking in the Dolomites: Alta Via 1 and Alta Via 2 (Cicerone Guides) Cool Colleges: For the Hyper-Intelligent, Self-Directed, Late Blooming, and Just Plain Different (Cool Colleges: For the Hyper-Intelligent, Self-Directed, Late Blooming, & Just Plain Different) Einstein's Dice and Schrödinger's Cat: How Two Great Minds Battled Quantum Randomness to Create a Unified Theory of Physics Math Geek: From Klein Bottles to Chaos Theory, a Guide to the Nerdiest Math Facts, Theorems, and Equations Spatial Ecology via Reaction-Diffusion Equations Heat Kernels and Dirac Operators (Grundlehren der mathematischen Wissenschaften) Elementary Particles and the Laws of Physics: The 1986 Dirac Memorial Lectures Negative Calorie Diet: Calorie Zero to Size Zero!: (Negative Calorie, Negative Calorie Diet, The Negative Calorie Diet, Negative Calorie Foods, Negative Calorie ... in a week, the negative calorie diet book) Re:ZERO, Vol. 3 - light novel (Re:ZERO -Starting Life in Another World-) Re:ZERO, Vol. 1 - manga: -Starting Life in Another World- (Re:ZERO -Starting Life in Another World-, Chapter 1: A Day in the Capital Manga) Re:ZERO -Starting Life in Another World-, Chapter 2: A Week at the

Mansion, Vol. 2 (manga) (Re:ZERO -Starting Life in Another World-, Chapter 2: A Week at the Mansion Manga) Re:ZERO, Vol. 2 - light novel (Re:ZERO -Starting Life in Another World-)  
Einstein's Cosmos: How Albert Einstein's Vision Transformed Our Understanding of Space and Time: Great Discoveries Frank Einstein and the Electro-Finger (Frank Einstein series #2): Book Two  
Frank Einstein and the EvoBlaster Belt (Frank Einstein series #4): Book Four Frank Einstein and the BrainTurbo (Frank Einstein series #3): Book Three

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)