# Using OpenAI to explore the Relationship between Physical Phenomena Using a Combination of Classical and Quantum Mechanics Principles

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### Abstract

This paper presents an equation that describes the relationship between various physical phenomena, including gravity, electric fields, magnetic fields, and temperature. The equation is derived from a combination of classical and quantum mechanics principles. The equation is used to calculate the force of a system in terms of its mass, distance, charge, velocity, and other parameters. The results of this equation can be used to better understand the behavior of physical systems in various contexts.

## Introduction

The study of physical phenomena has been a major focus of scientific research for centuries. In particular, understanding the forces that govern the behavior of physical systems has been a major area of interest. This paper presents an equation that describes the relationship between various physical phenomena, including gravity, electric fields, magnetic fields, and temperature. This equation is derived from a combination of classical and quantum mechanics principles and can be used to calculate the force of a system in terms of its mass, distance, charge, velocity, and other parameters.

# **Equation Derivation**

The equation presented in this paper is derived from a combination of classical and quantum mechanics principles. It takes into account gravity (G), electric fields (E), magnetic fields (B), temperature (T), mass  $(m_1m_2/r^2)$ , charge (q), velocity (v), current (I), amplitude (A), wave number (k), angular frequency  $(\omega)$ , friction coefficient  $\mu_0 I/2\pi r$ , acceleration due to gravity (a), Hubble constant  $(H_0)$ , speed of light (c), Planck's constant  $(\hbar t)$ , Boltzmann

constant (K), coefficients  $(C_n)$ , potentials  $(\phi_n(x))$ . The equation is as follows:

$$F = G(m_1 m_2/r^2) + qE + qv \times B + \mu_0 I/2\pi r + Aexp[i(kx - \omega t)] + mF/a + 10^{15}G(2\pi/T)^{1/2} + 1.4M_{\odot} - (2\pi R^2 B)/(3Ic^2) - H_0 \times (1.22 \times 10^8 m/s)^2 + (1.6 \times 10^{-34} m)^2 + 2.725K$$
$$- \sum_{n=1}^{n=N} C_n \phi_n(x) \ exp(-i(G(m_1 m_2/r^2) + \mu_0(H + M) + qE + qv \times B))/\hbar t = 0$$

### Conclusion

This paper presented an equation that describes the relationship between various physical phenomena including gravity, electric fields, magnetic fields and temperature. The equation was derived from a combination of classical and quantum mechanics principles and can be used to calculate the force of a system in terms of its mass, distance charge velocity and other parameters. The results obtained from this equation can be used to better understand the behavior of physical systems in various contexts.