## Unification

## Benjamin Allen Sullivan\*

A division of BASRC, Benjamin Allen Sullivan Renaissance Corporation, Toronto. Ontario, Canada

## **Short Communication**

Received date: 14/11/2016 Accepted date: 27/12/2016 Published date: 02/01/2017

### \*For Correspondence

Benjamin AS, A division of BASRC, Benjamin Allen Sullivan Renaissance Corporation, Toronto. Ontario, Canada.
Tel: +01 416 618 0366.

E-mail: CEO@BASRC.Biz

**Keywords:** Unifying Theory, Quantum gravity, Quantum communications, Probability, Quantum mechanics

#### **ABSTRACT**

The information contained within this publication contains new Physics discoveries that will completely alter our understanding of the nature of our Universe and the Forces within it, Gravity, and the interactions within Quantum Mechanics and Probability Theory.

### INTRODUCTION

This publication is comprised of two equations which are derived and extrapolated from a book that I created in 2015/2016: Probability, Quantum Mechanics, and Probability-Quanta. The latter consists of various thought experiments and postulates. I have included scans from the original book in an effort to demonstrate my work and in the hopes of having the experiments conducted.

I do not have any formal education in physics and I realize that producing the publication without any academic background will see the work be dismissed or seen as suspect by many. What I do possess is the ability to know when something is right.

Something is right.

### **SULLIVAN UNIFYING CONSTANT**

The Sullivan Unifying Constant is an equation that resolves the long-sought pursuit of understanding the unification of the known forces in the universe and how they interact with each other. This equation can be applied to or within any of the known sciences. The equation incorporates and demonstrates the interaction between forces known within "Classical Physics" and merges them with modern "Quantum Theory".

- 1. Each individual component of the equation has been professionally pursued with vigour by various people, schools, and various scientific organizations. As mentioned, the equation incorporates and demonstrates the interaction between forces known within "Classical Physics" and merges them with modern "Quantum Theory". It accomplishes this by incorporating the Spin Values (SV) of the Masses.
- 2. My equation resolves the long-sought pursuit of understanding the unification of the known forces in the universe and how they interact with each other. It does this by demonstrating the interchangeable nature of the known Force Carriers within the equation (Figures 1-9).

$$FC = T \frac{FCm1 \int_{C}^{Sv} FCm2 \int_{C}^{Sv} FCm^2}{FCd^2}$$

Figure 1: Sullivan Unifying Constant Equation

FC

Figure 2: FC = Any Force Carrier

FC = G for Gravity, EM for Electromagnetism, SF for Strong Force, WF for Weak Force.



Figure 3: Force Carriers.

$$F = T \frac{\text{SF}m1 \uparrow sv \text{WF}m2 \downarrow sv}{\text{EM}d^2}$$

Figure 4: Sullivan Unifying Constant Equation Example Using Force of Gravity.



Figure 5: Equation Component #1 - Force of Gravity.



Figure 6: Equation Component #2 - Time (Constant).

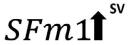


Figure 7: Equation Component #3 - Strong Force (SF) - Mass 1 (m1) with indication of Spin Value (SV) Entangled or Otherwise.

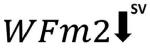


Figure 8: Equation Component #4 - Weak Force (WF) - Mass 2 (m2) with indication of Spin Value (SV) Entangled or Otherwise.

# $EMd^2$

Figure 9: Equation Component #5 - Electro Magnetism (EM) and Distance (d2).

- 4. Description: The Sullivan Unifying Constant demonstrates the interaction of the known forces within universe.
- 5. Examples of use: The Sullivan Unifying Constant provides enlightenment within all sciences. The equation offers a framework of understanding that allows for the creation of new technologies by progressing the field of science forward with new vigour derived from comprehension of the equation. Many of the implications (technological and otherwise) of the equation have yet to be discovered due to its newly formalized conception. It requires the contemplation of all with interest to achieve its maximum potential.

## **SULLIVAN-NEWTONIAN GRAVITATIONAL EQUATION**

The Sullivan-Newtonian Gravitational Equation is related to Gravity within the field of Physics and all other affected Sciences. The equation is an altercation of Sir Isaac Newton's Universal Law of Gravitation. The equation merges and demonstrates the interaction between what is known as "Classical Physics" and modern "Quantum Theory".

- 1. As mentioned, the equation merges and demonstrates the interaction between what is known as "Classical Physics" and modern "Quantum Theory". It accomplishes this by incorporating the Spin Values (SV) of the Masses into the original equation. Individual components of the original Sir Isaac Newton equation have been professionally pursued with vigour by various people, schools, and various scientific organizations [1].
  - 2. My equation resolves the long-sought pursuit of understanding the complete nature of Gravity (Figures 10-15)

$$F = G \frac{M1 \mathbf{1}^{sv} M2 \mathbf{I}^{sv}}{D^2}$$

Figure 10: Sullivan-Newtonian Gravitational Equation.

Figure 11: Equation Component #1 - Force of Gravity.

G

Figure 12: Equation Component #2 - Constant.



Figure 13: Equation Component #3 - Mass 1 (M1) with indication of Spin Value (SV) Entangled or Otherwise.

Figure 14: Equation Component #4 - Mass 2 (M2) with indication of Spin Value (SV) Entangled or Otherwise.

 $D^2$ 

Figure 15: Equation Component #5 - Distance (D2).

- 4. Description: The Sullivan-Newtonian Gravitational Equation demonstrates a comprehensive framework of Gravity.
- 5. Examples of use: The Sullivan-Newtonian Gravitational Equation provides enlightenment within all sciences affected by Gravity. The equation offers a framework of understanding that allows for the creation of new technologies by progressing the field of science forward with new vigour derived from comprehension of the equation. Many of the implications (technological and otherwise) of the equation have yet to be discovered due to its newly formalized conception. It requires the contemplation of all with interest to achieve its maximum potential (**Figures 16-30**).



Figure 16: Probability, Quantum Mechanics and Probability - Quanta.



Figure 17: Probability, Quantum Mechanics and Probability – Quanta Unification.

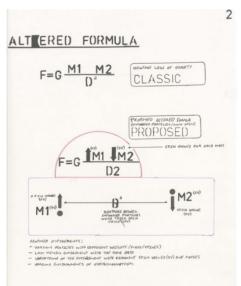


Figure 18: Spin values for each mass.

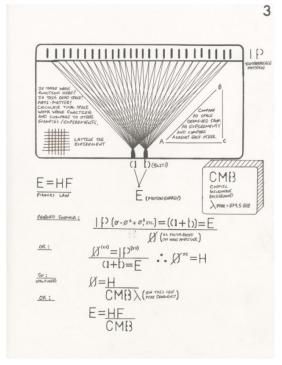


Figure 19: CMB - Cosmic Microwave Background.

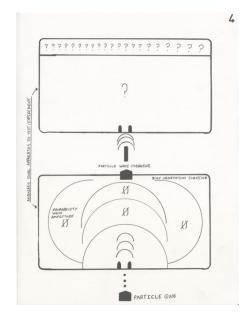


Figure 20: Dual apparatus to test/experiment.

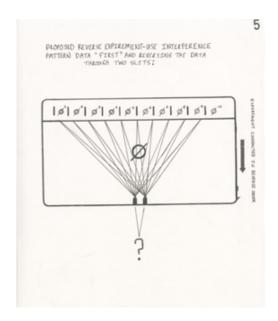


Figure 21: Proposed reverse experiment.

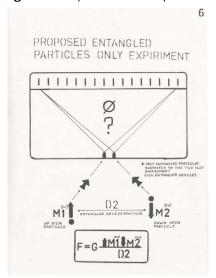


Figure 22: Proposed entangled practices only experiment.

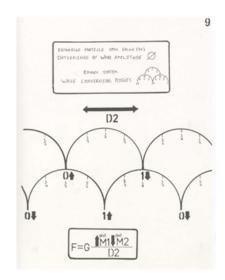


Figure 23: Entangled practice spin value.

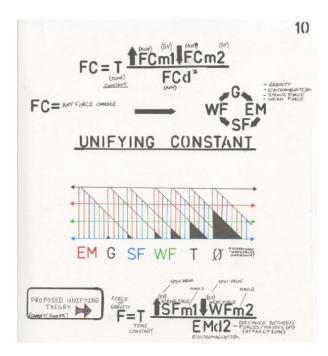


Figure 24: Unifying Constant.

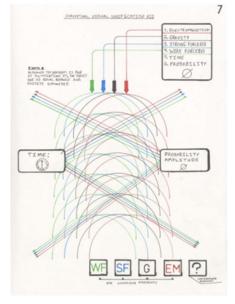


Figure 25: Conceptual visual unification AID.

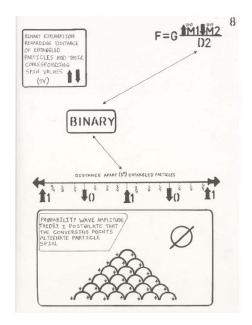
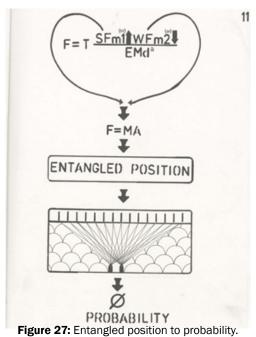


Figure 26: Binary explanation regarding distance of entangled particles and their corresponding spin values.



Tigure 21. Entangled position to probability.

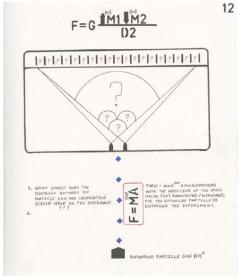


Figure 28: Entangled particle gun.

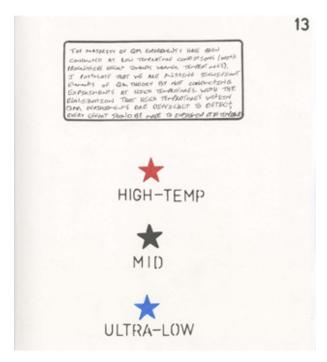
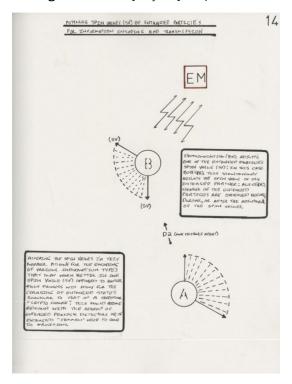


Figure 29: The majority of QM experiment.



**Figure 30:** Altering spin values of entangled particles for information encoding and transmission.

### **CONCLUSIONS**

In conclusion, I have a sound Unifying Theory; I have merged quantum and conventional gravity and de-mystified gravity entirely. I have resolved and provided viable methods for quantum communication. I have various other thought experiments that are ready for further exploration that I believe will reveal more ground-breaking Physics that are applicable to a wide-range of the Sciences.

I welcome any correspondence on the content of the publication and I look forward to receiving your feedback.

### **ACKNOWLEDGMENTS**

The author declares no conflict of interest for this work. The author declares no financial support for this work. The author would like to express his gratitude to my Father: Allen Sullivan for believing in me and to a very few select other people who know who they are.

## Research & Reviews: Journal of Pure and Applied Physics

e-ISSN:2320-2459 p-ISSN:2347-2316

## **REFERENCES**

1. Sir Isaac Newton: Philosophiæ Naturalis Principia Mathematica, 5 July 1687