Virtual Curvatures – 8T

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Abstract:

By analyzing the new framework, we can assemble a new version to the principle of virtual displacements presented in calculus of variations. Such a construction than would allow us to expend the horizons of the theory toward a mere completion. 8T construction shows that each static body is a mixture of arbitrary curvatures vanishing and alongside of it, arbitrary net curvatures, i.e. bosonic fields retaining the shape of the body.

Introduction

$$\frac{\partial \mathrm{L}}{\partial \mathrm{s}}\frac{\partial \mathrm{s}}{\partial \mathrm{M}}\frac{\partial \mathrm{M}}{\partial \mathrm{g}}\frac{\partial \mathrm{g}}{\partial \mathrm{t}}-\frac{\partial \mathrm{L}}{\partial \mathrm{s}'}\frac{\partial \mathrm{s}'}{\partial \mathrm{M}}\frac{\partial \mathrm{M}}{\partial \mathrm{g}'}\frac{\partial^2 g'}{\partial \mathrm{t}^2}=0 \qquad (1)$$

$$\left[\frac{\partial L}{\partial s}\frac{\partial s}{\partial M}\frac{\partial M}{\partial g}\right]\frac{\partial g}{\partial t}\delta g-\left[\frac{\partial L}{\partial s'}\frac{\partial s'}{\partial M}\frac{\partial M}{\partial g'}\right]\frac{\partial^2 g^{'}}{\partial \mathrm{t}^2}\delta g'=0$$

In calculus of variations, we have the procedure of the following for the vanishing of virtual displacements within a massive cluster. Such a procedure makes description of motion rather simple, as we do not need to describe the innate motion of a static body. Similar in a sense to the Laplace operator.

$$\sum_{i=1}^{N} F_i dr_i = 0 \qquad (1.1)$$

What would be the equivalent statement in the 8-theory? As we do not use force in the innate description of the theory, all we have is net curvature, N_V, on the Lorentz manifold, which was invoked stationary by the Lagrangian operator. We also did not use radius per se, it is different from the Riemann line element in which we associate curvature. One will suggest the following analogue for the equation (1.1):

$$\sum_{i=1}^{N} \delta g_i \partial L_i = 0 \qquad (1.11)$$

The sum of all arbitrary variations per varying manifold unit length is summed as zero. As we say variations, we mean curvature, so the sum of arbitrary curvatures is taken to zero. We can similarly use that construction in the same manner and for the same purposes used in calculus of variations, to avoid describing the inner motions of a static body.

Than if the static body experience a net curvature of certain magnitude, the coupling constants equation will be used to describe the process. These are not separate procedures. A rigid body of certain sort should have both at the same time. as this body is constructed by fermions which retain their position by net curvature as presented in the 8T:

$$F_{V=0} = 8 + (1) \tag{1.3}$$

$$F_R\# = \left(8 * \prod_{V=1}^{V=R} N_V + (3)\right) + N_V = 30{:}\,128{:}\,850{:}\,9254.. \tag{1.31}$$

$$N_V = 2\left(V + \frac{1}{2}\right);\ V \geq 0 \tag{1.32}$$

$$N_V \in \mathbb{P} \cup (+1);\ \mathbb{P} \rightarrow Set\ of\ Primes$$

$$N_V = P_{max} \in [0, \mathbb{R}] \cup (+1);\ P_{max} \in \mathbb{P}$$

$$8 + (1){:}\,\big(24 + (3)\big) + 3{:}\,\big(120 + (3)\big) + 5{:}\,\big(840 + (3)\big) + 7 \ldots \tag{1.33}$$

The overall conclusion is that in this framework there is a mixture of vanishing arbitrary amount of curvatures alongside net curvature that retain the original shape of the body. It is more complicated description than the original equation described by calculus of variations. It is influenced by recent developments that proved bosonic fields to be net curvature on the manifold, causing fermions to cluster. For example, the photon is associated with $N_V = (+5)$ curvatures and in this framework is bending space-time, not the opposite way around.

$$\sum_{i=1}^{M} \gamma_i = \sum_{i=1}^{M} \delta g_i > 0 \tag{1.34}$$

References

[1] O. Manor. "8 Theory – The Theory of Everything" In: (2021)