Langrangian Vertex Operator for Electrostatic Background Field in Ω

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Abstract

It's expected that electrostatic background signatures surmounts at the supersymmetric [SUSY] energy scale. These electrostatic background signatures is intrinsic to metamorphic space. In order to derive a Lagrangian vertex operator one must treat SUSY as a metamorphic phenomenon.

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SUSY and Metaspace

First we demonstrate the action integral for SUSY at $\mathcal{N} = 4$:[1]

$$\mathrm{I}_{\ \mathrm{SUSY}} = -\frac{1}{2}\int_M d^5\, e^{i\,(\mathrm{wt} - k\,\vec{x})} \sqrt{-g}\ [R - \frac{1}{l^3}] \ + \int_{\partial M} d^4\, e^{i\,(\mathrm{wt} - k\,\vec{x})}\, \hat{K}\, \sqrt{-h}\ - \int d^4\, e^{i\,(\mathrm{wt} - k\,\vec{x})} \sqrt{-h}\ \frac{1}{l^2}$$

One shows that the supersymmetric solution as equivalent to the Polyakov action integral linear sigma model for curve background fields. Such that:

$$\mathrm{I}_{\ \mathrm{SUSY}} = I_{\mathrm{Polyakov}}$$

Then one relates the difference:

$$\mathrm{I}_{\ \mathrm{SUSY}} - I_{\mathrm{Polyakov}} = \varnothing \Longrightarrow \mathrm{INTERFACE}$$

$$[\ -\frac{1}{2}\int_M d^5\ e^{i\,(\mathrm{wt} - k\,\vec{x})}\ \sqrt{-g}\ [R\ -\ \frac{1}{l^3}] \quad + \int_{\partial M} d^4\ e^{i\,(\mathrm{wt} - k\,\vec{x})}\ \hat{K}\, \sqrt{-h}\ \ - \int d^4\ e^{i\,(\mathrm{wt} - k\,\vec{x})}\ \sqrt{-h}\ \ \frac{1}{l^2}]\ -\ [\frac{1}{4\,\pi\,l^2} \int \partial^2 \xi\, [\sqrt{g}\ \ g^{\alpha\beta}\, G_\mu(x)\ +\ \epsilon^{\alpha\beta}\, B_\mu(x)]$$
$$\partial_\alpha X\, \partial_\beta X\ +\ \frac{1}{4\,\pi} \int d^2\, \xi\, \sqrt{g}\ \ R^{(2)}\ \Phi\,(x)] = \varnothing$$

INTERFACE = V < L, X^μ> = $\varnothing$ which is the vertex operator that yields the following Lagrangian for SUSY phenomenon in metaspace [2]:

$$\mathcal{L} = \oint \mathrm{V} < \mathrm{L},\ X^\mu > =\ \varnothing$$

References

[1] Sanchez-Rey, Miguel A. The Logical Structure of Space-Time. Vixra.org: 2011

[2] Sanchez-Rey, Miguel A. Logical Form in Favor of Long Equations. Vixra.org: 2016.