

## **Self-energy in the Gott-Hiscock space-time**

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### **Abstract**

We calculate the self-energy for an electrically charged particle at rest in the background of Gott-Hiscock cosmic string space-time. The self-energy continuously falls down outward from the string's center with maximum at the origin of the string. The plots of the numerical calculations of the self-energy and the height of barrier are shown.

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