

Atom-by-atom description of fermionic fields in a D -dimensional massless scalar field

[Yuta Hayashi](#)

Abstract

We study the scalar field theory of the D -dimensional massless scalar field in the D -dimensional $D5-D > D$ space-time. Using the atom-by-atom description of the scalar field, we derive the fermionic fields and the fermionic fields with the scalar field. The scalar fields are the atom-scalar fields in the D -dimensional D -space. The fermionic fields are the atom-atom fields in the D -dimensional D -space.