Cornell University Library

We gratefully acknowledge support from the Simons Foundation and member institutions

arXiv.org > math-ph > arXiv:1107.4577

Search or Article-id

(Help | Advanced search)

All papers | Go!

Mathematical Physics

A vanishing theorem for operators in Fock space

David Hasler, Ira Herbst

(Submitted on 22 Jul 2011)

We consider the bosonic Fock space over the Hilbert space of transversal vector fields in three dimensions. This space carries a canonical representation of the group of rotations. For a certain class of operators in Fock space we show that rotation invariance implies the absence of terms which either create or annihilate only a single particle. We outline an application of this result in an operator theoretic renormalization analysis of Hamilton operators, which occur in non-relativistic qed.

Comments: 14 pages
Subjects: **Mathematical Physics (math-ph)**
Cite as: **arXiv:1107.4577** [math-ph]
               (or **arXiv:1107.4577v1** [math-ph] for this version)

Submission history

From: David Hasler [view email]
[v1] Fri, 22 Jul 2011 17:06:55 GMT (15kb)

Which authors of this paper are endorsers?