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Peer Review

Review of: "Fermionic Casimir Effect at Finite Temperature in Hořava-Lifshitz Theories"

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Peer Review

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I have read this manuscript, which investigates the Casimir effect of the fermion field in the Horava-Lifshitz theory at finite temperature. The author used Hawking's generalized zeta function technique to calculate the free energy and Casimir pressure of the fermion field between parallel plates and discussed the influence of Lorentz symmetry breaking parameters on the calculation results.

This article has obtained some new results; I think this manuscript can be published.

But I still have some unclear questions:

(1) What is the physical meaning of the critical exponent? What is the critical temperature?

(2) The Lorentz breaking parameter is related to the energy scale. What is the relationship between the critical exponent and the energy scale?

(3) What is the physical meaning of zero Casimir pressure?

Attachments: available at https://doi.org/10.32388/YHVAPV

Declarations

Potential competing interests: No potential competing interests to declare.