

Review of: "Dimensional Regularization as Mass Generating Mechanism"

Samina Masood¹

¹ University of Houston - Clear Lake

Potential competing interests: No potential competing interests to declare.

The presentation of this paper is not according to the publication standards in general. Especially the references should be included in one of the required format of the journal and have include complete information about the author, title and year of publication along with the

- full reference of the journal including volume and page number
- published books with reference to the publisher
- arXived papers should also include all the information with URL.

URL of journals could be included in addition to all the above information

There is no way that I could go through all the detailed calculations. However, the limits discussed on page 8 includes that,

However, in Table (1), it is shown that in the limit of vanishing momentum, the infrared singularities are directly related to the soft mass limit. The relationship between $\Gamma(0)$, and $\Sigma(0)$ both for Pauli-Villars regularization and dimensional regularization shows directly that

$$\Lambda_{\mu\nu}^2/m^2 = 2/\varepsilon$$

This relation helps to use the generalized limit used as follows. It supports the argument more clearly.

"in the limit $m \ll \Lambda_{\mu\nu}$, Eq. (16); $\varepsilon(\mu) = 4 - d(\mu) - O(m^2/\Lambda_{\mu\nu}^2)$ holds.

Discussion of results is all linked with the references. There should be a little more description to include the summary of the work in various cited papers.

The presentation of the paper needs to be improved in general. The author is encouraged to read a few published articles in a journal or get some help from senior colleagues.