

Peer Review

Review of: "Constructing Longulence in the Galerkin-Regularized Nonlinear Schrödinger and Complex Ginzburg-Landau Systems"

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This paper aims to develop a rather general analysis of approximate solutions to one-dimensional nonlinear Schrödinger (NLS) and complex Ginzburg-Landau (CGL) equations, which can be produced by means of the Galerkin approximation (GA), i.e., a truncated expansion of generic complex solutions to those nonlinear equations over a basis of particular periodic (or some other) spatial modes. This direction of study is quite relevant, as the GA makes it possible to produce essential information about relevant solutions to the NLS and CGL equations and to make essential predictions for physical realizations of the models based on the NLS and CGL equations. It may be inferred from the text of the paper that the author aimed to obtain results demonstrating such fundamental properties of the GA solutions as their quasi-periodicity, proximity to integrability, stability, and some others. Such results, if presented in a sufficiently clear form, may be appropriate for publication. However, the present manuscript is drafted in an extremely obscure form, being practically unreadable, as a matter of fact. First, the text makes heavy use of mysterious terms, such as "longulence", "longulent", and "longongs". These terms are absent in most complete dictionaries available to the present reviewer, the only reference to their previous use being two arXiv preprints [3], which belong to the same author. I am wondering if normal words adopted in the standard scientific language are not sufficient to describe the author's analysis and results, making it necessary to invent previously unknown words. Another mysterious term is "whiskered tori", which are mentioned with reference to papers [7] and [8]. In the former paper, this term does not appear. It is used in the latter one, without any understandable definition. If the present author believes that this term is essential for use in the

present manuscript, the author should bother to clearly define it, as well as all other terms used in the paper (strictly avoiding the use of words that would definitely be confusing).

In addition to the use of non-existent words, the text is very difficult to read in many spots. For instance, a highlighted statement, *"For clarity, here we should require the nontrivial longulent state or longulence to be also with significant truncation effect; so, neither the state without a disordered component nor that with solitonic structure(s) but also already with convergence to the full-/untruncated-system one satisfies this criterion"*, is, obviously, written not "for clarity", but for the maximization of the unreadability of the paper. It seems plausible that parts of the text were drafted with the help of some AI-based application, without bothering to check if the so-produced text is legible. On top of these problems, another obvious one is that the captions to Figs. 1, 2, 3, and 4 do not say anything about the results plotted in those figures -- again, producing a strong impression that the objective was to draft a paper that would be as unreadable as possible.

I assume the author may be offered the option to completely rewrite the paper, with the objective of making it comprehensible. In its present form, the paper is absolutely inappropriate for publication, as no one would be able to read it.

Declarations

Potential competing interests: No potential competing interests to declare.