

Review of: "Continuum Models and Singularities for Heat Distributions From Light"

Meenakshi Sundar Kannan

Potential competing interests: No potential competing interests to declare.

Strengths:

- The article explores an interesting topic: using low-power light sources for heating with improved heat distribution.
- It references relevant scientific concepts (Navier-Stokes equations, Bernoulli principle, Poisson's equation).
- It proposes a model for pressure distribution due to buoyancy (Section 5.1).
- It discusses the potential for singularities in power distribution (Section 5.4).
- The future realizations section (Section 7) outlines potential experiments and simulations for practical implementation.

Areas for Improvement:

• Clarity and Conciseness:

- The writing style is dense and can be difficult to follow. Consider simplifying the language and sentence structure.
- Some terms could be better defined for a broader audience (e.g., "Dirac delta distribution," "Heaviside function").
- Some sections (e.g., 3.1) could be reorganized for better flow.

• Focus:

- The article covers a wide range of concepts. Consider streamlining the focus on the most novel aspects of the research, particularly the model for pressure distribution and its implications for heat distribution.

• Figures:

- While figures are included, some lack clear explanations of their relevance to the text (e.g., Figure 5).

• Originality:

- While the application of low-power light sources for heating is interesting, the novelty of the specific models used needs to be emphasized. Are there comparisons with existing approaches?

• Citations:

- Some references seem incomplete (e.g., reference [7]). Ensure all references are properly formatted.

Additional Suggestions:

- Include an abstract that summarizes the key points, research question, methodology, and main findings.
- Consider using subheadings within sections to improve readability.
- Add a conclusion section that reiterates the key findings and potential future research directions.