

Optical microscale for antiferromagnetic S_{ν} – optimistic conformable density

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ARTICLE INFO

Keywords:

Optical antiferromagnetic model
Conformable deSitter space
Microfluidic microscale
Optimistic density

ABSTRACT

In this paper, we present spherical antiferromagnetic S_{ν} – magnetic electromotive conformable $\Phi(\tau), \Phi(\nu), \Phi(\beta)$ microscales in conformable deSitter space. Also, we get optical antiferromagnetic S_{ν} –optimistic conformable $\Phi(\tau), \Phi(\nu), \Phi(\beta)$ densities. Finally, we obtain geometric antiferromagnetic S_{ν} –magnetic conformable $\Phi(\tau), \Phi(\nu), \Phi(\beta)$ microscales in conformable deSitter space.

Introduction

The modeling of optical electric and magnetic phases presents an essential role in optical physics, optical design of a wide range of optical components and devices with quantum applications in fields such as flux, imaging, and quantum electronic components. The investigation of geometric microfluidics phases constructs complex optical random systems [1–20].

Optical electromagnetic phase and flux are applied within specific geometric generation frameworks. The modeling of hybrid electromagnetic phases of antiferromagnetic and Heisenberg ferromagnetic effects have applications in complex electromagnetic flux and fluid dynamics with electromotive microscale systems [21–37].

The microscale model of ferromagnetic phases with electromagnetism in ferrophases for optical applications are important research model in materials shape, optical physics, and modeling. This model has important potential to drive energy flux in various optical fields, from electronics to energy conversion and flexible phases. Electromagnetic properties of ferrophases are significant in various optical geometric applications [38–56].

Optical applications of microscale structures offer a wide range of possibilities for various fields, including materials science, biotechnology, electronics, cell sorting, micromanipulation, and biophysics research. Electromotive microscale structures are combined into microfluidic designs to manipulate fluids on complex random models [57–67].

Research on spherical antiferromagnetic S_{ν} – magnetic electromotive is currently quite poor. In our study, we created optical antiferromagnetic S_{ν} –optimistic conformable density for the first time. The aim of our work, a general development method, is recommended for spherical optimistic density of conformable flow equations with illustrations of results in deSitter space. We view the cases of electromagnetic antiferromagnetic model for Lorentz forces. The advantage of our used deSitter space is spherical Minkowski space. Thus, we easily obtain spherical conformable flows in deSitter space [68,69]. The applications of antiferromagnetic model are electromagnetic surfaces [70–74].

The establishment of our paper is as follows. First, we characterize spherical antiferromagnetic S_{ν} –magnetic electromotive conformable $\Phi(\tau), \Phi(\nu), \Phi(\beta)$ microscales in conformable deSitter space. Also, we get optical antiferromagnetic S_{ν} –optimistic conformable $\Phi(\tau), \Phi(\nu), \Phi(\beta)$ densities. Finally, we obtain geometric antiferromagnetic S_{ν} – magnetic conformable $\Phi(\tau), \Phi(\nu), \Phi(\beta)$ microscales in conformable deSitter space.

Optical recursion operator

Considering conformable derivative model of spherical conformable frame $\{\tau, \nu, \beta\}$ is

$$\begin{aligned}\partial_{\sigma}\tau &= \epsilon^{-\sigma+1}\nu, \\ \partial_{\sigma}\nu &= \epsilon^{-\sigma+1}\tau + \epsilon^{1-\sigma}\mu\beta,\end{aligned}$$

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<https://doi.org/10.1016/j.rinp.2024.107515>

Received 14 September 2023; Received in revised form 10 February 2024; Accepted 23 February 2024

Available online 27 February 2024

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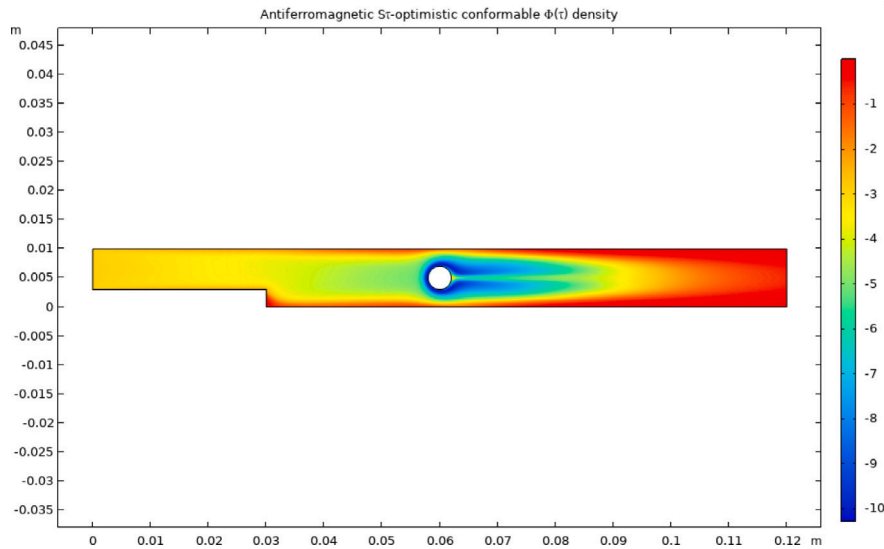


Fig. 1. Sv- optimistic conformable $\Phi(\tau)$ density with reactor at 300K.

$$\partial_\sigma \beta = \mu \epsilon^{1-\sigma} \nu.$$

Also field products given by

$$\tau \times \beta = \nu,$$

$$\nu \times \beta = \tau,$$

$$\tau \times \nu = \beta,$$

$$\langle \tau, \tau \rangle = 1, \langle \nu, \nu \rangle = -1, \langle \beta, \beta \rangle = 1.$$

‡ Lorentz ν -conformable fields are given

$$\Phi(\tau) = \epsilon^{1-\sigma} \nu + \chi \beta,$$

$$\Phi(\nu) = \epsilon^{1-\sigma} \tau + \epsilon^{1-\sigma} \mu \beta,$$

$$\Phi(\beta) = -\chi \tau + \mu \epsilon^{1-\sigma} \nu,$$

$$\mathbf{G} = \mu \epsilon^{1-\sigma} \tau - \chi \nu - \epsilon^{1-\sigma} \beta,$$

where $\chi = g(\Phi(\tau), \beta)$ is conformable smooth potential.

Since, we have

$$\partial_\sigma \Phi(\tau) = \epsilon^{2-2\sigma} \tau + (\chi \epsilon^{1-\sigma} \mu + \epsilon^{1-2\sigma} (1-\sigma)) \nu + (\epsilon^{2-2\sigma} \mu + \epsilon^{1-\sigma} \frac{\partial \chi}{\partial \epsilon}) \beta,$$

$$\begin{aligned} \partial_\sigma \Phi(\nu) &= \epsilon^{1-2\sigma} (1-\sigma) \tau + (\epsilon^{2-2\sigma} \mu^2 + \epsilon^{2-2\sigma}) \nu + (\mu(1-\sigma) \epsilon^{-2\sigma+1} \\ &\quad + \frac{\partial \mu}{\partial \epsilon} \epsilon^{2-2\sigma}) \beta, \end{aligned}$$

$$\begin{aligned} \partial_\sigma \Phi(\beta) &= (-\frac{\partial \chi}{\partial \epsilon} \epsilon^{1-\sigma} + \epsilon^{2-2\sigma} \mu) \tau + (\epsilon^{2-2\sigma} \frac{\partial \mu}{\partial \epsilon} + (1-\sigma) \epsilon^{1-2\sigma} \mu - \epsilon^{1-\sigma} \chi) \nu \\ &\quad + (\mu \epsilon^{1-\sigma})^2 \beta. \end{aligned}$$

Sv-Electromotive conformable $\Phi(\tau)$ microscale

First, we can represent by

$$\Phi(\tau) = \epsilon^{1-\sigma} \nu + \chi \beta$$

By conformal differentiating above field, we get

$$\begin{aligned} \partial_\sigma \Phi(\tau) &= \epsilon^{2-2\sigma} \tau + (\chi \epsilon^{1-\sigma} \mu + \epsilon^{1-2\sigma} (1 \\ &\quad -\sigma)) \nu + (\epsilon^{2-2\sigma} \mu + \epsilon^{1-\sigma} \frac{\partial \chi}{\partial \epsilon}) \beta. \end{aligned}$$

Therefore, we can write

$$\begin{aligned} \Phi(\tau) \times \partial_\sigma \Phi(\tau) &= (\epsilon^{1-\sigma} (\epsilon^{2-2\sigma} \mu + \epsilon^{1-\sigma} \frac{\partial \chi}{\partial \epsilon}) \\ &\quad - \chi (\chi \epsilon^{1-\sigma} \mu + \epsilon^{1-2\sigma} (1-\sigma))) \tau - \chi \epsilon^{2-2\sigma} \nu - \epsilon^{3-3\sigma} \beta. \end{aligned}$$

The flow of $\Phi(\tau)$ is written by

$$\begin{aligned} \partial_t \Phi(\tau) &= (\epsilon^{2-2\sigma} \mathcal{F} - \mathcal{L} \chi \epsilon^{1-\sigma}) \tau + (\chi (\epsilon^{1-\sigma} \frac{\partial \mathcal{L}}{\partial \epsilon} \\ &\quad + \mathcal{F} \epsilon^{1-\sigma} \mu)) \nu + (\frac{\partial \chi}{\partial t} + \epsilon^{1-\sigma} (\frac{\partial \mathcal{L}}{\partial \epsilon} \epsilon^{1-\sigma} + \mathcal{F} \epsilon^{1-\sigma} \mu)) \beta. \end{aligned}$$

♣ Optical Sv-magnetic electromotive conformable $\Phi(\tau)$ microscale is presented

$$\begin{aligned} \mathcal{E}_{\Phi(\tau)} &= -\frac{d}{dt} \int_{\tau} \mathbb{I}_\sigma (\chi (\chi (\epsilon^{1-\sigma} \frac{\partial \mathcal{L}}{\partial \epsilon} + \mathcal{F} \epsilon^{1-\sigma} \mu)) + \mu \epsilon^{1-\sigma} (\epsilon^{2-2\sigma} \mathcal{F} \\ &\quad - \mathcal{L} \chi \epsilon^{1-\sigma}) + \epsilon^{1-\sigma} (\frac{\partial \chi}{\partial t} + \epsilon^{1-\sigma} (\frac{\partial \mathcal{L}}{\partial \epsilon} \epsilon^{1-\sigma} + \mathcal{F} \epsilon^{1-\sigma} \mu))) d\pi. \end{aligned}$$

♣ Optical Sv-optimistic conformable $\Phi(\tau)$ density is

$$\begin{aligned} \mathcal{D}_{\Phi(\tau)} &= \mu \epsilon^{1-\sigma} (\epsilon^{2-2\sigma} \mathcal{F} - \mathcal{L} \chi \epsilon^{1-\sigma}) + \chi (\chi (\epsilon^{1-\sigma} \frac{\partial \mathcal{L}}{\partial \epsilon} \\ &\quad + \mathcal{F} \epsilon^{1-\sigma} \mu)) + \epsilon^{1-\sigma} (\frac{\partial \chi}{\partial t} + \epsilon^{1-\sigma} (\frac{\partial \mathcal{L}}{\partial \epsilon} \epsilon^{1-\sigma} + \mathcal{F} \epsilon^{1-\sigma} \mu)) \end{aligned}$$

♣ Geometric Sv-magnetic conformable $\Phi(\tau)$ microscale is presented by

$$\begin{aligned} {}^B \mathcal{M}_{\Phi(\tau)} &= \epsilon^{1-\sigma} \epsilon \int_{\tau} \mathbb{I}_\sigma (\epsilon^{1-\sigma} (\frac{\partial \chi}{\partial t} + \epsilon^{1-\sigma} (\frac{\partial \mathcal{L}}{\partial \epsilon} \epsilon^{1-\sigma} + \mathcal{F} \epsilon^{1-\sigma} \mu)) \\ &\quad + \mu \epsilon^{1-\sigma} (\epsilon^{2-2\sigma} \mathcal{F} - \mathcal{L} \chi \epsilon^{1-\sigma}) + \chi (\chi (\epsilon^{1-\sigma} \frac{\partial \mathcal{L}}{\partial \epsilon} + \mathcal{F} \epsilon^{1-\sigma} \mu))) d\pi, \end{aligned}$$

where ϵ is Sv- magnetic potential.

♣ Optical antiferromagnetic Sv- magnetic electromotive conformable $\Phi(\tau)$ microscale is presented

$$\begin{aligned} \mathcal{E}_{\Phi(\tau)}^{afr} &= -\frac{d}{dt} \int_{\tau} \mathbb{I}_\sigma (-\epsilon^{4-4\sigma} - \chi^2 \epsilon^{2-2\sigma} + (\epsilon^{1-\sigma} (\epsilon^{2-2\sigma} \mu \\ &\quad + \epsilon^{1-\sigma} \frac{\partial \chi}{\partial \epsilon}) - \chi (\chi \epsilon^{1-\sigma} \mu + \epsilon^{1-2\sigma} (1-\sigma))) \mu \epsilon^{1-\sigma}) d\pi. \end{aligned}$$

♣ Optical antiferromagnetic Sv-optimistic conformable $\Phi(\tau)$ density is

$$\begin{aligned} \mathcal{D}_{\Phi(\tau)}^{afr} &= (\epsilon^{1-\sigma} (\epsilon^{2-2\sigma} \mu + \epsilon^{1-\sigma} \frac{\partial \chi}{\partial \epsilon}) - \chi (\chi \epsilon^{1-\sigma} \mu \\ &\quad + \epsilon^{1-2\sigma} (1-\sigma))) \mu \epsilon^{1-\sigma} - \chi^2 \epsilon^{2-2\sigma} - \epsilon^{4-4\sigma}. \end{aligned}$$

♣ Geometric antiferromagnetic Sv- magnetic conformable $\Phi(\tau)$ microscale is presented by

$$\begin{aligned} \mathcal{M}_{\Phi(\tau)}^{afr} &= \epsilon^{1-\sigma} \epsilon \int_{\tau} \mathbb{I}_\sigma (-\chi^2 \epsilon^{2-2\sigma} + (\epsilon^{1-\sigma} (\epsilon^{2-2\sigma} \mu \\ &\quad + \epsilon^{1-\sigma} \frac{\partial \chi}{\partial \epsilon}) - \chi (\chi \epsilon^{1-\sigma} \mu + \epsilon^{1-2\sigma} (1-\sigma))) \mu \epsilon^{1-\sigma} - \epsilon^{4-4\sigma}) d\pi. \end{aligned}$$

Fig. 1 shows the antiferromagnetic Sv- optimistic conformable $\Phi(\tau)$ density in reactor domain along with fluid indicating the Sv-magnetic potential.

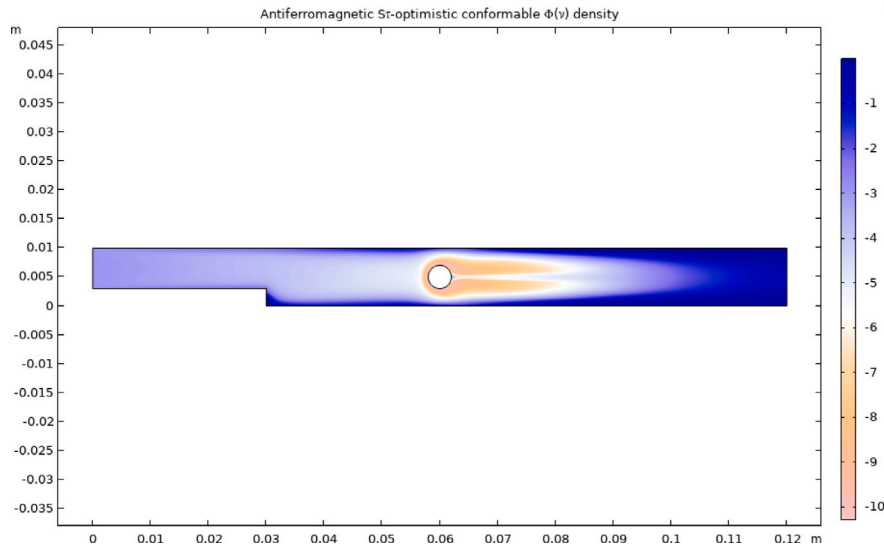


Fig. 2. S_v - optimistic conformable $\Phi(v)$ density with reactor at 200K.

S_v -Electromotive conformable $\Phi(v)$ microscale

First, we can represent by

$$\Phi(v) = \epsilon^{1-\sigma} \tau + \epsilon^{1-\sigma} \mu \beta.$$

By conformal differentiating above field, we get

$$\partial_\sigma \Phi(v) = \epsilon^{1-2\sigma} (1-\sigma) \tau + (\epsilon^{2-2\sigma} \mu^2 + \epsilon^{2-2\sigma}) v + (\mu(1-\sigma) \epsilon^{-2\sigma+1} + \frac{\partial \mu}{\partial \epsilon} \epsilon^{2-2\sigma}) \beta.$$

Therefore, we can write

$$\Phi(v) \times \partial_\sigma \Phi(v) = -\epsilon^{1-\sigma} \mu (\epsilon^{2-2\sigma} \mu^2 + \epsilon^{2-2\sigma}) \tau + (\epsilon^{1-\sigma} (\mu(1-\sigma) \epsilon^{-2\sigma+1} + \frac{\partial \mu}{\partial \epsilon} \epsilon^{2-2\sigma}) - \epsilon^{1-\sigma} \mu \epsilon^{1-2\sigma} (1-\sigma)) v + \epsilon^{1-\sigma} (\epsilon^{2-2\sigma} \mu^2 + \epsilon^{2-2\sigma}) \beta.$$

The flow of $\Phi(\tau)$ is written by

$$\partial_t \Phi(v) = -\epsilon^{2-2\sigma} \mu \mathcal{L} \tau + (\epsilon^{1-\sigma} \mathcal{F} + \epsilon^{1-\sigma} \mu (\epsilon^{1-\sigma} \frac{\partial \mathcal{L}}{\partial \epsilon} + \mathcal{F} \epsilon^{1-\sigma} \mu)) v + (\epsilon^{1-\sigma} \frac{\partial}{\partial t} (\mu) + \mathcal{L} \epsilon^{1-\sigma}) \beta.$$

♣ *Optical S_v -magnetic electromotive conformable $\Phi(v)$ microscale is presented*

$$\mathcal{E}_{\Phi(v)} = -\frac{d}{dt} \int_\tau \mathbb{I}_\sigma (\epsilon^{1-\sigma} (\epsilon^{1-\sigma} \frac{\partial \mu}{\partial t} + \mathcal{L} \epsilon^{1-\sigma}) + \chi (\epsilon^{1-\sigma} \mathcal{F} + \epsilon^{1-\sigma} \mu (\epsilon^{1-\sigma} \frac{\partial \mathcal{L}}{\partial \epsilon} + \mathcal{F} \epsilon^{1-\sigma} \mu))) - \epsilon^{3-3\sigma} \mu^2 \mathcal{L} d\pi.$$

♣ *Optical S_v -optimistic conformable $\Phi(v)$ density is*

$$D_{\Phi(v)} = \chi (\epsilon^{1-\sigma} \mathcal{F} + \epsilon^{1-\sigma} \mu (\epsilon^{1-\sigma} \frac{\partial \mathcal{L}}{\partial \epsilon} + \mathcal{F} \epsilon^{1-\sigma} \mu)) - \epsilon^{3-3\sigma} \mu^2 \mathcal{L} + \epsilon^{1-\sigma} (\epsilon^{1-\sigma} \frac{\partial \mu}{\partial t} + \mathcal{L} \epsilon^{1-\sigma}).$$

♣ *Geometric S_v -magnetic conformable $\Phi(v)$ microscale is presented by*

$${}^B \mathcal{M}_{\Phi(v)} = \epsilon^{1-\sigma} \epsilon \int_\tau \mathbb{I}_\sigma (-\epsilon^{3-3\sigma} \mu^2 \mathcal{L} + \chi (\epsilon^{1-\sigma} \mathcal{F} + \epsilon^{1-\sigma} \mu (\epsilon^{1-\sigma} \frac{\partial \mathcal{L}}{\partial \epsilon} + \mathcal{F} \epsilon^{1-\sigma} \mu))) + \epsilon^{1-\sigma} (\epsilon^{1-\sigma} \frac{\partial \mu}{\partial t} + \mathcal{L} \epsilon^{1-\sigma}) d\pi,$$

where ϵ is S_v - magnetic potential.

♣ *Optical antiferromagnetic S_v - magnetic electromotive conformable $\Phi(v)$ microscale is presented*

$$\mathcal{E}_{\Phi(v)}^{afr} = -\frac{d}{dt} \int_\tau \mathbb{I}_\sigma (\epsilon^{4-4\sigma} (\mu^2 + 1) - \epsilon^{2-2\sigma} \mu^2 (\epsilon^{2-2\sigma} \mu^2 + \epsilon^{2-2\sigma})) + \chi (\epsilon^{1-\sigma} (\mu(1-\sigma) \epsilon^{-2\sigma+1} + \frac{\partial \mu}{\partial \epsilon} \epsilon^{2-2\sigma}) - \epsilon^{1-\sigma} \mu \epsilon^{1-2\sigma} (1-\sigma)) d\pi.$$

♣ *Optical antiferromagnetic S_v -optimistic conformable $\Phi(v)$ density is*

$$D_{\Phi(v)}^{afr} = -\epsilon^{2-2\sigma} \mu^2 (\epsilon^{2-2\sigma} \mu^2 + \epsilon^{2-2\sigma}) + \chi (\epsilon^{1-\sigma} (\mu(1-\sigma) \epsilon^{-2\sigma+1} + \frac{\partial \mu}{\partial \epsilon} \epsilon^{2-2\sigma}) - \epsilon^{1-\sigma} \mu \epsilon^{1-2\sigma} (1-\sigma)) + \epsilon^{2-2\sigma} (\epsilon^{2-2\sigma} \mu^2 + \epsilon^{2-2\sigma}).$$

♣ *Geometric antiferromagnetic S_v - magnetic conformable $\Phi(v)$ microscale is presented by*

$$\mathcal{M}_{\Phi(v)}^{afr} = \epsilon^{1-\sigma} \epsilon \int_\tau \mathbb{I}_\sigma (\chi (\epsilon^{1-\sigma} (\mu(1-\sigma) \epsilon^{-2\sigma+1} + \frac{\partial \mu}{\partial \epsilon} \epsilon^{2-2\sigma}) - \epsilon^{1-\sigma} \mu \epsilon^{1-2\sigma} (1-\sigma)) - \epsilon^{2-2\sigma} \mu^2 (\epsilon^{2-2\sigma} \mu^2 + \epsilon^{2-2\sigma}) + \epsilon^{2-2\sigma} (\epsilon^{2-2\sigma} \mu^2 + \epsilon^{2-2\sigma})) d\pi.$$

Fig. 2 shows the antiferromagnetic S_v - optimistic conformable $\Phi(v)$ density in reactor domain along with fluid indicating the S_v -magnetic potential.

S_v -Electromotive conformable $\Phi(\beta)$ microscale

First, we can represent by

$$\Phi(\beta) = -\chi \tau + \mu \epsilon^{1-\sigma} v.$$

By conformal differentiating above field, we get

$$\partial_\sigma \Phi(\beta) = (-\frac{\partial \chi}{\partial \epsilon} \epsilon^{1-\sigma} + \epsilon^{2-2\sigma} \mu) \tau + (\epsilon^{2-2\sigma} \frac{\partial \mu}{\partial \epsilon} + (1-\sigma) \epsilon^{1-2\sigma} \mu - \epsilon^{1-\sigma} \chi) v + (\mu \epsilon^{1-\sigma})^2 \beta.$$

Therefore, we can write

$$\Phi(\beta) \times \partial_\sigma \Phi(\beta) = \mu^3 \epsilon^{3-3\sigma} \tau - \chi (\mu \epsilon^{1-\sigma})^2 v - (\chi (\epsilon^{2-2\sigma} \frac{\partial \mu}{\partial \epsilon} + (1-\sigma) \epsilon^{1-2\sigma} \mu - \epsilon^{1-\sigma} \chi) + \mu \epsilon^{1-\sigma} (-\frac{\partial \chi}{\partial \epsilon} \epsilon^{1-\sigma} + \epsilon^{2-2\sigma} \mu)) \beta.$$

The flow of $\Phi(\beta)$ is written by

$$\partial_t \Phi(\beta) = (\mu \mathcal{F} \epsilon^{2-2\sigma} - \frac{\partial \chi}{\partial t}) \tau + (\frac{\partial \mu}{\partial t} \epsilon^{1-\sigma} - \chi \mathcal{F}) v + (\mu \epsilon^{1-\sigma} (\frac{\partial \mathcal{L}}{\partial \epsilon} \epsilon^{1-\sigma} + \mathcal{F} \epsilon^{1-\sigma} \mu) - \chi \mathcal{L}) \beta.$$

♣ *Optical S_v -magnetic electromotive conformable $\Phi(\beta)$ microscale is presented*

$$\mathcal{E}_{\Phi(\beta)} = -\frac{d}{dt} \int_\tau \mathbb{I}_\sigma (\mu \epsilon^{1-\sigma} (\mu \mathcal{F} \epsilon^{2-2\sigma} - \frac{\partial \chi}{\partial t}) + (\frac{\partial \mu}{\partial t} \epsilon^{1-\sigma} - \chi \mathcal{F}) \chi - (\mu \epsilon^{1-\sigma} (\frac{\partial \mathcal{L}}{\partial \epsilon} \epsilon^{1-\sigma} + \mathcal{F} \epsilon^{1-\sigma} \mu) - \chi \mathcal{L}) \epsilon^{1-\sigma}) d\pi.$$

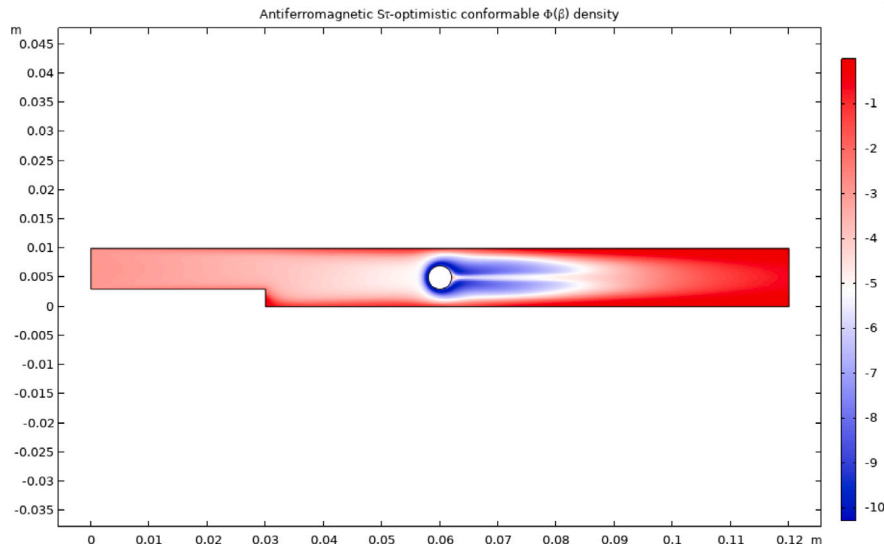


Fig. 3. Sv- optimistic conformable $\Phi(\beta)$ density with reactor at 400K.

♣ Optical Sv-optimistic conformable $\Phi(\beta)$ density is

$$D_{\Phi(\beta)} = \left(\frac{\partial \mu}{\partial t} \epsilon^{1-\sigma} - \chi F\right) \chi + \epsilon^{1-\sigma} \mu (\mu F \epsilon^{2-2\sigma} - \frac{\partial \chi}{\partial t}) - (\mu \epsilon^{1-\sigma} (\frac{\partial \mathcal{L}}{\partial \epsilon} \epsilon^{1-\sigma} + F \epsilon^{1-\sigma} \mu) - \chi \mathcal{L}) \epsilon^{1-\sigma}.$$

♣ Geometric Sv-magnetic conformable $\Phi(\beta)$ microscale is presented by

$${}^B \mathcal{M}_{\Phi(\beta)} = \epsilon^{1-\sigma} \epsilon \int_{\tau} \mathbb{I}_{\sigma} (-\epsilon^{1-\sigma} (\mu \epsilon^{1-\sigma} (\frac{\partial \mathcal{L}}{\partial \epsilon} \epsilon^{1-\sigma} + F \epsilon^{1-\sigma} \mu) - \chi \mathcal{L})) + (\frac{\partial \mu}{\partial t} \epsilon^{1-\sigma} - \chi F) \chi + \epsilon^{1-\sigma} \mu (\mu F \epsilon^{2-2\sigma} - \frac{\partial \chi}{\partial t}) d\pi,$$

where ϵ is Sv- magnetic potential.

♣ Optical antiferromagnetic Sv- magnetic electromotive conformable $\Phi(\beta)$ microscale is presented

$$\mathcal{E}_{\Phi(\beta)}^{afr} = -\frac{d}{dt} \int_{\tau} \mathbb{I}_{\sigma} (\mu^4 \epsilon^{4-4\sigma} - \chi^2 (\mu \epsilon^{1-\sigma})^2 + \epsilon^{1-\sigma} (\chi (\epsilon^{2-2\sigma} \frac{\partial \mu}{\partial \epsilon} + (1-\sigma) \epsilon^{1-2\sigma} \mu - \epsilon^{1-\sigma} \chi) + \mu \epsilon^{1-\sigma} (-\frac{\partial \chi}{\partial \epsilon} \epsilon^{1-\sigma} + \epsilon^{2-2\sigma} \mu))) d\pi.$$

♣ Optical antiferromagnetic Sv-optimistic conformable $\Phi(\beta)$ density is

$$D_{\Phi(\beta)}^{afr} = \mu^4 \epsilon^{4-4\sigma} - \chi^2 (\mu \epsilon^{1-\sigma})^2 + \epsilon^{1-\sigma} (\chi (\epsilon^{2-2\sigma} \frac{\partial \mu}{\partial \epsilon} + (1-\sigma) \epsilon^{1-2\sigma} \mu - \epsilon^{1-\sigma} \chi) + \mu \epsilon^{1-\sigma} (-\frac{\partial \chi}{\partial \epsilon} \epsilon^{1-\sigma} + \epsilon^{2-2\sigma} \mu)).$$

♣ Geometric antiferromagnetic Sv- magnetic conformable $\Phi(\beta)$ microscale is presented by

$$\mathcal{M}_{\Phi(\beta)}^{afr} = \epsilon^{1-\sigma} \epsilon \int_{\tau} \mathbb{I}_{\sigma} (-\chi^2 (\mu \epsilon^{1-\sigma})^2 + \epsilon^{1-\sigma} (\chi (\epsilon^{2-2\sigma} \frac{\partial \mu}{\partial \epsilon} + (1-\sigma) \epsilon^{1-2\sigma} \mu - \epsilon^{1-\sigma} \chi) + \mu \epsilon^{1-\sigma} (-\frac{\partial \chi}{\partial \epsilon} \epsilon^{1-\sigma} + \epsilon^{2-2\sigma} \mu)) + \mu^4 \epsilon^{4-4\sigma}) d\pi.$$

Fig. 3 shows the antiferromagnetic Sv- optimistic conformable $\Phi(\beta)$ density in reactor domain along with fluid indicating the Sv- magnetic potential.

Conclusion

Spherical optical electromagnetic energy and flux are illustrated by flexible elastic curves, optical waves and biharmonic sonics. The results of optical modeling of biharmonic magnetic curves with optical applications are characterized.

In this article, we present spherical antiferromagnetic Sv-magnetic electromotive conformable $\Phi(\tau), \Phi(\nu), \Phi(\beta)$ microscales in

conformable deSitter space. Also, we get optical antiferromagnetic Sv- optimistic conformable $\Phi(\tau), \Phi(\nu), \Phi(\beta)$ densities. Finally, we obtain geometric antiferromagnetic Sv-magnetic conformable $\Phi(\tau), \Phi(\nu), \Phi(\beta)$ microscales in conformable deSitter space.

CRedit authorship contribution statement

Ferdous M. Tawfig: Investigation, Data curation, Conceptualization. **Talat Körpınar:** Visualization, Validation, Supervision, Funding acquisition, Conceptualization. **Zeliha Körpınar:** Writing – review & editing, Writing – original draft, Visualization, Validation, Supervision, Methodology, Investigation. **Mustafa Inc:** Resources, Project administration, Methodology, Formal analysis.

Declaration of competing interest

I am the corresponding author and on behalf of all authors I declare that we have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

No data was used for the research described in the article.

Acknowledgments

This research was supported by the Researchers Supporting Project Number (RSP2024R440), King Saud University, Riyadh, Saudi Arabia.

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