

On fractional Orlicz-Hardy inequalities

Subhajit Roy

Indian Institute of Technology Madras, Chennai, India
ma19d009@smail.iitm.ac.in

T. V. Anoop

Indian Institute of Technology Madras, Chennai, India
anoop@iitm.ac.in

Prosenjit Roy

Indian Institute of Technology Kanpur, Kanpur, India
prosenjit@iitk.ac.in

We establish the weighted fractional Orlicz-Hardy inequalities for various Orlicz functions. Further, we identify the critical cases for each Orlicz function and prove the weighted fractional Orlicz-Hardy inequalities with logarithmic correction.

References

- [1] Anoop, T V and Roy, Prosenjit and Roy, Subhajit, On fractional Orlicz-Hardy inequalities, arXiv.2401.06434, 2024.