

Publication List

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Preprints and articles

1. Y. Luo
A Legendre-Fenchel identity for the nonlinear Schrödinger equations on $\mathbb{R}^d \times \mathbb{T}^m$: theory and applications.
(arxiv: 2307.16153)
2. A. Esfahani, H. Hajaiej, Y. Luo and L. Song
On the focusing fractional nonlinear Schrödinger equation on the waveguide manifolds.
(arxiv: 2305.19791)
3. Y. Luo
Almost sure scattering for the defocusing cubic nonlinear Schrödinger equation on $\mathbb{R}^3 \times \mathbb{T}$.
(arxiv: 2304.12914)
4. P. Dondl, Y. Luo, S. Neukamm and S. Wolff-Vorbeck
Efficient uncertainty quantification for mechanical properties of randomly perturbed elastic rods.
(arxiv: 2304.08785)
5. Y. Luo, X. Yu, H. Yue and Z. Zhao
On well-posedness results for the cubic-quintic NLS on \mathbb{T}^3 .
(arxiv: 2301.13433)
6. H. Hajaiej, Y. Luo and L. Song
On existence and stability results for normalized ground states of mass-subcritical biharmonic NLS on $\mathbb{R}^d \times \mathbb{T}^n$.
(arxiv: 2212.00750)
7. Y. Luo
Normalized ground states and threshold scattering for focusing NLS on $\mathbb{R}^d \times \mathbb{T}$ via semivirial-free geometry.
(arxiv: 2205.04969)
8. Y. Luo
Sharp scattering for focusing intercritical NLS on high-dimensional waveguide manifolds.
Math. Ann., accepted.
(arxiv: 2212.10908)
9. Y. Luo
On long time behavior of the focusing energy-critical NLS on $\mathbb{R}^d \times \mathbb{T}$ via semivirial-vanishing geometry.
J. Math. Pures Appl., accepted.
(arxiv: 2206.07346)
10. Y. Luo
On sharp scattering threshold for the mass-energy double critical NLS via double track profile decomposition.
Ann. Inst. H. Poincaré C Anal. Non Linéaire, accepted.
(arxiv: 2108.00915)

11. Y. Luo
Sharp scattering threshold for the cubic-quintic NLS in the focusing-focusing regime.
J. Funct. Anal. 283 (2022), no. 1, Paper No. 109489, 34 pp.
 (arxiv: 2105.15091)
12. Y. Luo
On the local in time well-posedness of an elliptic-parabolic ferroelectric phase-field model.
Nonlinear Anal. Real World Appl. 65 (2022), Paper No. 103462, 30 pp.
 (arxiv: 2011.00085)
13. Y. Luo and A. Stylianou
On 3d dipolar Bose-Einstein condensates involving quantum fluctuations and three-body interactions.
Discrete Contin. Dyn. Syst. Ser. B 26 (2021), no. 6, 3455-3477.
 (arxiv: 1902.05591)
14. Y. Luo and A. Stylianou
Ground states for a nonlocal mixed order cubic-quartic Gross-Pitaevskii equation.
J. Math. Anal. Appl. 496 (2021), no. 1, Paper No. 124802, 20 pp.
 (arxiv: 1806.00697)

Permanent notes

1. Y. Luo
Large data global well-posedness and scattering for the focusing cubic nonlinear Schrödinger equation on $\mathbb{R}^2 \times \mathbb{T}$.
 (arxiv: 2202.10219)
2. Y. Luo and A. Stylianou
Normalized ground states for 3D dipolar Bose-Einstein condensate with attractive three-body interactions.
 (arxiv: 2202.09801)
3. Y. Luo
Scattering threshold for radial defocusing-focusing mass-energy double critical nonlinear Schrödinger equation in $d \geq 5$.
 (arxiv: 2106.06993)