Research Papers of Chunlin Liu[1]

Published papers:

1. Chunrong Feng, Wen Huang, **Chunlin Liu** and Huaizhong Zhao. Ergodicity and Mixing of invariant capacities and applications. Ann. Appl. Probab., to appear.

2. **Chunlin Liu**, Rongzhong Xiao and Leiye Xu. Pinsker σ-algebra character and mean Li-Yorke chaos. J. Dynam. Differential Equations. 37 (2025), no. 4, 2799–2816.

3. **Chunlin Liu**, Changlin Wang and Weisheng Wu. Relative sequence entropy for amenable group actions. J. Differential Equations. 445 (2025), 113582.

4. **Chunlin Liu**, Xiangtong Wang and Leiye Xu. Sequence entropy and IT-tuples for minimal group actions. Adv. Math. 467 (2025), Paper No. 110183.

5. **Chunlin Liu**. Directional weak mixing for $\mathbb{Z}^q$-actions. Fund. Math. 268 (2025), no. 1, 73–100.

6. **Chunlin Liu** and Leiye Xu. Directional Pinsker algebra and its applications. J. Math. Phys. 65 (2024), no. 10, Paper No. 102702, 12 pp.

7. **Chunlin Liu**. Positive density subsets in amenable groups. J. Dynam. Differential Equations. 36 (2024), 2283–2288.

8. **Chunlin Liu**, Feng Tan and Jianhua Zhang. Mean Li-Yorke chaos along any infinite sequence for infinite-dimensional random dynamical systems. J. Differential Equations. 403 (2024), 548–575.

9. **Chunlin Liu** and Fagner B. Rodrigues. Metric Mean Dimension via Preimage Structures. J. Stat. Phys. 191 (2024), no. 2, 31.

10. Jie Li, **Chunlin Liu**, Siming Tu and Tao Yu. Sequence entropy tuples and mean sensitive tuples. Ergodic Theory Dynam. Systems 44 (2024), no. 1, 184–203.

11. **Chunlin Liu** and Xue Liu. The irregular set for maps with almost weak specification property has full metric mean dimension. J. Math. Anal. Appl. 534 (2024), no. 1, Paper No. 128043, 26 pp.

12. **Chunlin Liu** and Leiye Xu. Directional Kronecker algebra for $\mathbb{Z}^q$-actions. Ergodic Theory Dynam. Systems 43 (2023), no. 4, 1324–1350.

13. **Chunlin Liu** and Xiaomin Zhou. Directional entropy dimension of topological dynamical systems. J. Differential Equations 333 (2022), 332–360.

14. **Chunlin Liu** and Kesong Yan. Sequence entropy for amenable group actions. Phys. Scripta DOI: 10.1088/1402-4896/ad0f05 (Publish online)

15. **Chunlin Liu** and Fei Wang. Parameter identification of genetic regulatory network with time-varying delays via adaptive synchronization method. Adv. Difference Equ. (2020), Paper No. 127, 15 pp.[2]

Preprints:

1. Alex Jenaro Becker, **Chunlin Liu** and Fagner B Rodrigues. Nonlinear (preprint) DOI: 10.13140/RG.2.2.31532.12162

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[1]All authors are assumed to have contributed equally and are listed alphabetically.

[2]This paper was published in my undergraduate studies and is not my current research interest.

2. Lino Haupt, Tobias Jäger and **Chunlin Liu**. A note on multivariate diam mean equicontinuity and frequent stability. (preprint)
arXiv:2506.23313

3. Pintu Debnath, Sayan Goswami and **Chunlin Liu**. The Interplay between Additive and Multiplicative Central Sets Theorems. (preprint)
arXiv:2506.00369

4. Chunrong Feng, Wen Huang, **Chunlin Liu** and Huaizhong Zhao. Finite ergodic components for upper probabilities. (preprint)
arXiv:2411.02030

5. Wen Huang, **Chunlin Liu**, Shige Peng and Baoyou Qu. Ergodicity and Mixing of Sublinear Expectation System and Applications. (preprint)
arXiv:2411.03512

6. **Chunlin Liu**, Leiye Xu and Shuhao Zhang. Independence, sequence entropy and mean sensitivity for invariant measures. (preprint)
arXiv:2501.08069

7. **Chunlin Liu**, Leiye Xu nd Shuhao Zhang. Independence and mean sensitivity in minimal systems under group actions. (preprint)
arXiv:2501.15622

8. **Chunlin Liu**, Baoyou Qu, Jinxiang Yao and Yanpeng Zhi. Unstable Invariant Measures and Connecting Orbits of Cooperative McKean-Vlasov SDEs. (preprint)
arXiv:2501.15622

9. **Chunlin Liu** and Leiye Xu. Directional bounded complexity, mean equicontinuity and discrete spectrum for $\mathbb{Z}^q$-actions. (preprint)
arXiv:2105.03132

10. Lucas Backes, **Chunlin Liu** and Fagner B. Rodrigues. Variational principles for metric mean dimension with potential of level sets. (preprint)
arXiv:2407.16548

11. **Chunlin Liu**. Mean Li–Yorke chaos along some sequence under amenable group actions. (preprint)
DOI: 10.13140/RG.2.2.30311.15525