

Yueqi Cao

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Education

- **Beijing Institute of Technology**

- Sep 2018 –
Master Candidate in Mathematics. Advisor: Huafei Sun.
- Sep 2014 – Jun 2018
Bachelor of Science in Mathematics.

Publications

- **2020**

- J.Jin, S.Zhang, **Y.Cao**, E.Zhang, H.Sun, Rigid Shape Registration Based on Extended Hamiltonian Learning, *Entropy*. [[published](#)]
- Y.Wang, H.Sun, **Y.Cao**, S.Zhang, Torsion Discriminance for Stability of Linear Time-Invariant Systems, *Mathematics*. [[published](#)]

- **2019**

- **Y.Cao**, D.Li, H.Sun, A.H.Assadi, S.Zhang, Efficient Weingarten Map and Curvature Estimation on Manifolds. [[preprint](#)]

- **2018**

- Y.Wang, H.Sun, Y.Song, **Y.Cao**, S.Zhang, Description of Stability for Two and Three-Dimensional Linear Time-Invariant Systems Based on Curvature and Torsion. [[preprint](#)]

Conferences

- **2019**

- **Y.Cao**, S.Zhang, F.Yan, W.Li, F.Sun, H.Sun, Unsupervised Environmental Sound Classification Based On Topological Persistence, *IEEE International Conference on Signal, Information and Data Processing 2019*. [[published](#)]
- S.Zhang, **Y.Cao**, W.Li, F.Yan, Y.Luo, H.Sun, A New Riemannian Structure in SPD(n), *IEEE International Conference on Signal, Information and Data Processing 2019*. [[published](#)]

- 2018

- **Y.Cao**, Data Science from a Topological Viewpoint, *The Second International Conference on Mathematical Characterization, Analysis and Applications of Complex Information*, Beijing, China. [[slides](#)]

- 2017

- A.Xiong, A.H.Assadi, **Y.Cao**, Calculating Persistence Homology of Attractors in High-Dimensional Chaotic Systems. *2017 International Conference on Computational Science and Computational Intelligence*. [[published](#)]

Work Experiences

- Beijing Institute of Technology

- Aug 2019 – Jan 2020
Teaching Assistant on Mathematical Analysis.
- Aug 2018 – Jun 2019
Teaching Assistant on Linear Algebra.

Awards

- National Scholarship for Graduate Students, *Ministry of Education of the People's Republic of China*, 2019.
- Second Prize of Innovation Scholarship of Industry and Information Technology of People's Republic of China, *Ministry of Industry and Information Technology of the People's Republic of China*, 2017.
- Winning Prize of Geometry and Topology in 8th S.T.Yau College Student Mathematics Contests, *S.T.Yau College Student Mathematics Contests*, 2017.
- Winning Prize of Team in 8th S.T.Yau College Student Mathematics Contests, *S.T.Yau College Student Mathematics Contests*, 2017.