

Qiyuan Chen

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No.55 East Road, Zhongguancun, Beijing, China, 100190

Education

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| <i>University of Chinese Academy of Sciences</i> | <i>Beijing, China</i> | <i>Sep 2021- present</i> |
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- Ph.D in **applied mathematics**, supervised by Prof. Ke Ye
- **Awards:** Merit student

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| <i>Zhejiang University</i> | <i>Hangzhou, China</i> | <i>Sep 2017-Jun 2021</i> |
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- Bachelor of **Mathematics**
- **Awards:** First Prize Scholarship for Basic Discipline Excellence Program

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| <i>Mianyang High School</i> | <i>Mianyang, China</i> | <i>Sep 2014-Jun 2017</i> |
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- **Competition:** The third prize of China Mathematics Olympiad (**CMO**); Gold medal of Western Mathematics Olympiad

Publication

Chen Q, Uhlmann J, Ye K. *Generalizing Frobenius inversion to quaternion matrices*[JJ]. **Numerical Algorithms**, 2023: 1-16

- We generalize the well-known inversion algorithm for complex matrix to the quaternion matrix. We also prove the optimality of this method both algebraically and numerically.

Chen Q, Ye K. *A quasi-optimal lower bound for skew polynomial multiplication*[JJ]. accepted by **ISSAC 2024**

- We establish a lower bound of the complexity of multiplying elements in skew polynomial ring. This lower bound achieve the upper bound conjectured by Caruso and Borgne in 2017 up to a log factor. Also, we propose algorithms in some cases which achieve the conjecture upper bound.

Social Services

Refereed for:

- Advances in Applied Clifford Algebras
- Linear and Multilinear algebra

Conference:

- CM2023, Dalian, China
- CM2024, Fuzhou, China
- 7-th China-South Korean- Japan Conference for Matrix Theory, 2023.11, Nanchang, China

Work experiences

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| <i>Teaching assistant of linear algebra course in UCAS</i> | <i>Sep 2022– Jun 2023</i> |
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- Teaching exercise lectures of linear algebra lesson for 30 students for 2 semesters.

Skills

Language: English

Computer: Matlab , Maple , Python, C, R