


# Rui Xiong

熊锐; Xióng Ruì. 

---



[cubicbear.github.io](https://cubicbear.github.io)

## Personal Information

- **First Name** RUI
- **Last Name** XIONG
- **E-mail** [rxion043@uOttawa.ca](mailto:rxion043@uOttawa.ca)
- **Advisor** Kirill Zainoulline

## Education

- **B.Sc.** 2015 – 2019, SHANDONG UNIVERSITY, CHINA.  
关于群行列式理论 (*On the theory of group determinants*)  
Advisor: Shoumin Liu
- **M.Sc.** 2019 – 2021, SAINT PETERSBURG STATE UNIVERSITY, RUSSIA.  
*Comodule Structure of Chow Rings of Flag Varieties*  
Advisor: Victor Petrov
- **PhD student** 2022 – 2026, UNIVERSITY OF OTTAWA, CANADA.  
*Hecke type algebras, Schubert calculus and its Applications to algebraic cycles*  
Advisor: Kirill Zainoulline

## Publications

- [1] 集合论、拓扑与代数初步 (*An introduction to set theory, topology and algebra*).  
TSINGHUA UNIVERSITY PRESS, ISBN: 9787302541646 (2019).  
Shoumin Liu and Rui Xiong
- [2] *Automorphisms of the Quantum Cohomology of the Springer Resolution and Applications*.  
ADVANCES IN MATHEMATICS, Volume 442, April 2024, 109577.  
Changzheng Li, Changjian Su and Rui Xiong [[arXiv:2304.07173](https://arxiv.org/abs/2304.07173)]
- [3] *Equivariant log-concavity and equivariant Kähler packages*.  
To appear in JOURNAL OF ALGEBRA (2024).  
Tao Gui and Rui Xiong [[arXiv:2205.05420](https://arxiv.org/abs/2205.05420)]

## Preprints

- [4] *Pieri and Murnaghan–Nakayama type Rules for Chern classes of Schubert Cells*. (submitted)  
Neil J.Y. Fan, Peter L. Guo and Rui Xiong [[arXiv:2211.06802](https://arxiv.org/abs/2211.06802)]
- [5] *Structure algebras, Hopf algebroids and oriented cohomology of a group*. (submitted)  
Martina Lanini, Rui Xiong and Kirill Zainoulline [[arXiv:2303.02409](https://arxiv.org/abs/2303.02409)]
- [6] *Bumpless pipe dreams meet puzzles*. (submitted)  
Neil J.Y. Fan, Peter L. Guo and Rui Xiong [[arXiv:2309.00467](https://arxiv.org/abs/2309.00467)]

- [7] *On the Peterson subalgebra and its dual.*  
Rui Xiong, Changlong Zhong and Kirill Zainoulline [[arXiv:2312.03965](#)]
- [8] *A Pieri type formula for motivic Chern classes of Schubert cells in Grassmannians.* (submitted)  
Neil J.Y. Fan, Peter L. Guo, Changjian Su and Rui Xiong [[arXiv:2402.04500](#)]
- [9] *Motivic Lefschetz theorem for twisted Milnor hypersurfaces.*  
Rui Xiong and Kirill Zainoulline [[arXiv:2404.07314](#)]
- [10] coming soon ...

## L<sup>A</sup>T<sub>E</sub>X

- [11] The L<sup>A</sup>T<sub>E</sub>X package TooYoung. [[Github:CubicBear/TooYoung](#)]

