

Rui Xiong

熊锐; Pinyin: Xióng Ruì.



Personal Information

- **First Name** Rui
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Degrees

- **B.Sc.** 2019, SHANDONG UNIVERSITY, CHINA
Thesis Title: 关于群行列式 (*On the theory of group determinants*)
Supervisor: Shoumin Liu
- **M.Sc.** 2021, SAINT PETERSBURG STATE UNIVERSITY, RUSSIA
Thesis Title: *Comodule Structure of Chow Rings of Flag Varieties*
Supervisor: Victor Petrov

Publications

- [1] 集合论、拓扑与代数初步 (*An introduction to set theory, topology and algebra*).
Shoumin Liu and Rui Xiong, Tsinghua University Press. ISBN: 9787302541646.

Preprints

- [2] *Equivariant log-concavity and equivariant Kähler packages*.
Tao Gui and Rui Xiong [arXiv:2205.05420] math.CO math.AG
- [3] *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] math.CO math.AG
- [4] *Structure algebras, Hopf algebroids and oriented cohomology of a group*. (submitted)
Martina Lanini, Rui Xiong and Kirill Zainoulline [arXiv:2303.02409] math.AG math.RT math.CO
- [5] *Automorphisms of the Quantum Cohomology of the Springer Resolution and Applications*. (submitted)
Changzheng Li, Changjian Su and Rui Xiong [arXiv:2304.07173] math.AG math.RT math.CO
- [6] *Bumpless pipe dreams meet puzzles*. (submitted)
Neil J.Y. Fan, Peter L. Guo and Rui Xiong [arXiv:2309.00467] math.CO math.AG
- [7] *On the Peterson subalgebra and its dual*
Rui Xiong, Changlong Zhong and Kirill Zainoulline [arXiv:2312.03965] math.RA math.AG
- [8] coming soon ...

L^AT_EX

- [9] The L^AT_EX package TooYoung. (Github: CubicBear/TooYoung)

Research Areas

Algebraic Combinatorics. Enumerative Geometry.

Talks

- **2022 May** Hook Formulae and Schubert Calculus [at Sichuang University](#)
- **2023 Feb** Pieri Type Rules for Chern Classes of Schubert Cells [at the University of British Columbia, UBC Discrete Math seminaar](#)
- **2023 Apr** Chern–Schwartz–MacPherson Classes over Flag Varieties: Pieri Rules, Conjectures, and More [at Schubert seminar](#)
- **2023 Jun** Automorphisms of the Quantum Cohomology of the Springer Resolution and Applications [at University of Ottawa, CMS](#)
- **2023 Jun** Structure algebras, Hopf algebroids and oriented cohomology of a group [at University of Ottawa, CMS](#)
- **2023 Nov** Bumpless pipe dreams meet puzzles [at University at Albany, Algebra/Topology seminar](#)
- **2023 Dec** Bumpless pipe dreams meet puzzles [at University at Virginia Tech, VT Algebra Seminar](#)