

Education

- 2023 – now **International Curriculum Center (ICC), The High School Affiliated to Renmin University of China**, Beijing, China
High School Student
- 2020 – 2023 **The High School Affiliated to Renmin University of China**, Beijing, China
Secondary School Student

Publications

- 1 **Runbo Li.** A remark on the distribution of \sqrt{p} modulo one involving primes of special type. *Hiroshima Mathematical Journal*. (to appear).

Preprints

- 1 **Runbo Li.** On some problems of primes with the floor function. *arXiv*. [arXiv:2308.16301v1](https://arxiv.org/abs/2308.16301v1).
- 2 **Runbo Li.** On the upper and lower bound orders of almost prime triples. *arXiv*. [arXiv:2401.01348v1](https://arxiv.org/abs/2401.01348v1).
- 3 **Runbo Li.** A remark on the distribution of \sqrt{p} modulo one involving primes of special type. *arXiv*. [arXiv:2401.01351v1](https://arxiv.org/abs/2401.01351v1).
- 4 **Runbo Li.** Remarks on additive representations of natural numbers. *arXiv*. [arXiv:2309.03218v7](https://arxiv.org/abs/2309.03218v7).
- 5 **Runbo Li.** Hybrid estimation of exponential sums, exceptional characters and primes in short intervals. *arXiv*. [arXiv:2401.11139v3](https://arxiv.org/abs/2401.11139v3).
- 6 **Runbo Li.** A remark on large even integer of the form $p + P_3$. *arXiv*. [arXiv:2403.09691v1](https://arxiv.org/abs/2403.09691v1).
- 7 **Runbo Li.** On a conjecture involving twin practical numbers. *Preprints*. [preprints202504.1211.v1](https://arxiv.org/abs/202504.1211.v1).
- 8 **Runbo Li.** On Chen's theorem, Goldbach's conjecture and almost prime twins. *arXiv*. [arXiv:2405.05727v3](https://arxiv.org/abs/2405.05727v3).

- 9 **Runbo Li.** On the primitive divisors of quadratic polynomials. *arXiv.* [arXiv:2406.07575v1.](#)
- 10 **Runbo Li.** Primes in almost all short intervals. *arXiv.* [arXiv:2407.05651v6.](#)
- 11 **Runbo Li.** On the largest prime factor of integers in short interval. *Preprints.* [preprints202504.1212.v2.](#)
- 12 **Runbo Li.** On the Piatetski–Shapiro prime number theorem. *Preprints.* [preprints202504.1190.v1.](#)
- 13 **Runbo Li.** On the Piatetski–Shapiro prime number theorem II. *Preprints.* [preprints202504.1165.v2.](#)
- 14 **Runbo Li.** The number of primes in short intervals and numerical calculations for Harman’s sieve. *arXiv.* [arXiv:2308.04458v8.](#)
- 15 **Runbo Li.** A note on variants of Buchstab’s identity. *arXiv.* [arXiv:2504.07974v1.](#)
- 16 **Runbo Li.** On prime-producing sieves and distribution of $\alpha p - \beta \bmod 1$. *arXiv.* [arXiv:2504.13195v3.](#)
- 17 **Runbo Li.** Primes in arithmetic progressions to smooth moduli: A minorant version. *arXiv.* [arXiv:2505.09629v2.](#)
- 18 **Runbo Li.** On almost primes in Piatetski–Shapiro sequences. *arXiv.* [arXiv:2505.09634v1.](#)
- 19 **Runbo Li.** On the generalized Dirichlet divisor problem. *Preprints.* [preprints202505.1432.v3.](#)
- 20 **Runbo Li.** Largest square divisors of shifted primes. *arXiv.* [arXiv:2505.23779v2.](#)
- 21 **Runbo Li.** A remark on the distribution of \sqrt{p} modulo one involving primes of special type II. *arXiv.* [arXiv:2401.01351v3.](#)
- 22 **Runbo Li.** On the largest prime factor of quadratic polynomials. *arXiv.* [arXiv:2406.07575v2.](#)
- 23 **Runbo Li.** On Chen’s theorem, Goldbach’s conjecture and almost prime twins II. *arXiv.* [arXiv:2405.05727v4.](#)
- 24 **Runbo Li.** On the largest prime factor of integers in short intervals II. *Cambridge Open Engage.* [10.33774/coe-2025-xnbjq-v2.](#)

- 25 **Runbo Li.** On the exceptional set in the abc conjecture. *arXiv.* [arXiv:2507:02885v1](#).
- 26 **Runbo Li.** An average Brun–Titchmarsh theorem and shifted primes with a large prime factor. *arXiv.* [arXiv:2508:18285v3](#).
- 27 **Runbo Li.** On Chen's theorem, Goldbach's conjecture and almost prime twins III. *Cambridge Open Engage.* [10.33774/coe-2025-5kl50](#).
- 28 **Runbo Li.** Primes in almost all short intervals II. *Cambridge Open Engage.* [10.33774/coe-2025-jrnjl](#).

Other works

- 1 **Runbo Li.** On the weighted AM-GM inequality and refined inequalities between arithmetic functions. *preprint*.
- 2 **Runbo Li.** Primes in almost all short intervals III. *preprint*.
- 3 **Runbo Li.** Bombieri–Vinogradov Theorem in shorter intervals. *preprint*.

Talks

- 1 On Chen's theorem, Goldbach's conjecture and applications of sieve methods. *S.-T. Yau High School Science Award (Mathematics) Global Final Research Report*. Tsinghua University. 2024.
- 2 On the Goldbach's conjecture. *2025 "Haidian π Mathematics Festival" Closing Ceremony Research Presentation*. The High School Affiliated to Beijing Institute of Technology. 2025.
- 3 Primes in short intervals. *Online Meeting Invited Speaker*. Online. 2025.