

# Li Lai

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## Education

- 2021-Present **Tsinghua University**, Beijing, China.  
Ph.D. Mathematics, Advisor: Pin Yu
- 2014-2020 **Tsinghua University**, Yau Mathematical Sciences Center.  
M.S. Mathematics, Advisor: Pin Yu
- 2010-2014 **Tsinghua University**, Beijing, China.  
B.S. Mathematics

## Research Interests

Transcendental number theory; wave equation.

## Publications and Preprints

4. Li Lai,  
*On the largest prime divisor of  $n! + 1$ ,*  
[arXiv:2103.14894](https://arxiv.org/abs/2103.14894)
3. Li Lai and Li Zhou,  
*At least two of  $\zeta(5), \zeta(7), \dots, \zeta(35)$  are irrational,*  
[arXiv:2103.00904](https://arxiv.org/abs/2103.00904)
2. Li Lai, Jiong-Yue Li and Pin Yu,  
*On the rigidity of stationary charged black holes: small perturbations of the non-extremal Kerr-Newman family,*  
accepted by J. Differential Geom. [arXiv:1911.10560](https://arxiv.org/abs/1911.10560)
1. Li Lai and Pin Yu,  
*A note on the number of irrational odd zeta values,*  
Compos. Math. 156 (2020), no. 8, 1699-1717. [arXiv:1911.08458](https://arxiv.org/abs/1911.08458)

## Awards and Honors

- 2012 Nianzeng Sun Mathematical Analysis Award (at Tsinghua University)
- 2010 International Mathematical Olympiad: Gold Medal

## Talks

- June 27, 2020 Webinar on APDE (online)  
Recent progress on the irrationality of  $\zeta(2k+1)$ .

## Teaching Assistant Experiences

- Spring 2021 Real Analysis (Yijun Yao, Fudan University)  
Fall 2017 Mathematical Analysis 3 (Pin Yu, Tsinghua University)  
Spring 2017 Mathematical Analysis 2 (Chenghao Sun, Tsinghua University)  
Spring 2016 Linear Algebra (Lingbing He, Tsinghua University)  
2014-2015 Mathematical Analysis 1-3 (Xuguang Lu, Tsinghua University)

## Other Experiences and Activities

- 2020-2021 Research assistant at Fudan University  
2017 Finisher of Columbia168 ULTRA-TRAIL® THREE GORGES  
Spring 2013 Exchange student at École normale supérieure, Paris, France

CV updated: Sept. 8, 2021