# **Curriculum Vitae of Rongxing Xu**

Updated on 07/2023

#### **Contact Information**

School of Mathematical Sciences Zhejiang Normal University No. 688, Yingbin Road, 321000, Jinhua, Zhejiang, China Emails: xurongxing@zjnu.edu.cn Tel: +86 15268635685

#### **Research interests**

I am interested in structural graph theory, graph coloring, graph homomorphism, combinatorial game...

### **Employments**

Lecture
School of Mathematical Sciences,
Zhejiang Normal University
Postdoctoral Fellow, Advisor: Prof. Jie Ma
School of Mathematical Sciences,
University of Science and Technology of China

### Education

09/2017-06/2021:	Ph.D. in Mathematics, Advisor: Prof. Xuding Zhu
	Department of Mathematics, Zhejiang Normal University
09/2014-06/2017:	M.Sc. in Mathematics, Advisor: Prof. Xinzhong Lv
	Department of Mathematics, Zhejiang Normal University
09/2010-06/2014:	B.Sc. in Mathematics
	Department of Mathematics, Henan University

### **Research Visits**

10/2018 - 09/2020:	Visiting Ph.D. student, IRIF, Université de Paris
	worked with Prof. Reza Naserasr
	supported by China Scholarship Council (CSC)
01/2019 - 03/2019:	École Normale Supérieure (Paris), worked with Prof. Pierre Aboulker
12/2019 & 02/2020:	University of Ljubljana, worked with Prof. Riste Škrekovski
	two times, together for four weeks

## **Publications**

- 1. Reza Naserasr, Riste Škrekovski, Zhouninxin Wang, **Rongxing Xu**. Mapping sparse signed graphs to  $(K_{2k}, M)$ . *Journal of Graph Theory*, 2023, Accepted.
- 2. **Rongxing Xu**, Xuding Zhu, The strong fractional choice number and the strong fractional paint number of graphs. *SIAM Journal on Discrete Mathematics*. 36(4),2022, 2585-2601.
- 3. **Rongxing Xu**, Xuding Zhu, The strong fractional choice number of 3-choice-critical graphs. *Journal of Graph Theory*. 2022; 1-28.
- 4. **Rongxing Xu**, Xuding Zhu, Multiple list coloring of 3-choice critical graphs. *Journal of Graph Theory*. 2020; 95:638-654.
- 5. **Rongxing Xu**, Yeong-Nan Yeh, Xuding Zhu, List colouring and generalized Dyck paths. *Discrete Mathematics*. 341(2018) 810-819.
- 6. **Rongxing Xu**, Xuding Zhu, Bounded Greedy Nim Game. *Theoretical Computer Science*. 746 (2018) 1–5.
- 7. Xinzhong Lv, **Rongxing Xu**, Xuding Zhu, Greedy Nim<sub>k</sub> Game. *Journal of Combinatorial Optimization*. 35(4):1241-1249,2018.

## **Submitted Papers**

- 1. Jie Ma, **Rongxing Xu**, Xuding Zhu, On Two problems about defective choosability of graphs. *Submitted*.
- 2. Rongxing Xu, Xuding Zhu, Decomposition of triangle-free planar graphs. *Submitted*.
- 3. Florent Foucaud, Reza Naserasr, **Rongxing Xu**, Extended Double Cover and homomorphism bounds. *Submitted*.

# Manuscripts

1. Jie Ma, Rongxing Xu, Cycle covering and a conjecture of Voss. *Manuscript*.

### Talks

- Decomposition of triangle-free planar graphs. CSIAM Activity Group on Graph Theory and Combinatorics with Applications 2022 Annual conference, Onleine, December, 2022.
- The strong fractional choice number of graphs, Chinese Mathematics Society 2021 Annual Conference - Graph and Combinatorics satellite meeting, Kunming, Yunnan, October, 2021.
- The strong fractional choice number of graphs, Fifth Macedonian Workshop on Graph Theory and Applied Mathematics, Online, September, 2021.

- The strong fractional choice number of graphs, CanaDAM, Online, May, 2021.
- Multiple list colouring of 3-choice critical graphs, IRIF Seminar, Paris, September, 2020.
- Homomorphism of  $K_4$ -minor-free graphs, Midsummer Combinatorial Workshop XXIV, Prague, Czech Republic, August, 2019.

### Services

Referee for:

- SIAM Journal on Discrete Mathematics,
- Journal of Graph Theory,
- Theoretical Computer Science.

## Skills

- Language: Chinese(native), English (intermediate)
- Programming: Python, Matlab
- Software: SageMath, Matlab