

## CURRICULUM VITAE OF QINGHAI ZHONG

### Personal data

- Citizenship: Chinese
- Languages: Chinese, English
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Heinrichstrasse 36, 8010 Graz, Austria

### Education and Positions

- March 2014 – present,    Postdoc (FWF-Project: Sets of Lengths in Krull monoids)  
Institute for Mathematics and Scientific Computing, University of Graz
- July 2013 – Feb. 2014,    Assistant researcher  
Department of Mathematics, Shanghai Normal University
- Sep. 2008 – June 2013,    Ph.D., Combinatorial Number Theory  
Center for Combinatorics, Nankai University  
Advised by Prof. Weidong Gao
- Sept. 2004 – June 2008,    B.S. Degree, Pure Mathematics  
College of Mathematics, Sichuan University

### Research Interests

- Combinatorial and Additive Number Theory: Zero-Sum Theory and Additive Problems (11P70, 11R27, 11B30, 11B50 20K01).
- Commutative Algebra : Non-unique Factorization Theory (11B30, 11R27, 13A05, 20M13).

### Research Projects

- Additive Combinatorics and Arithmetic of Krull Monoids: Liese-Meitner project M1641-N26 (applicant from abroad: Q. Zhong; Austrian co-applicant: A. Geroldinger), March 2014 – Feb. 2016.
- Sets of lengths in Krull monoids: FWF: P 28864-N35 (As participate), March 2016 – June 2019.

**List of Publications since 2015**

1. The catenary degree of Krull monoids II,  
*With A. Geroldinger*, J. Aust. Math. Soc., 98(3): 324–354, 2015.
2. Subsequence sums of zero-sum free sequences over finite abelian groups,  
*With Y. Qu, X. Xia, and L. Xue*, Colloq. Math., 140: 119–127, 2015.
3. The set of minimal distances in Krull monoids,  
*With A. Geroldinger*, Acta Arith., 173: 97–120, 2016.
4. On the Erdős-Ginzburg-Ziv constant of groups of the form  $C_2^r \oplus C_n$ ,  
*With Y. Fan*, Int. J. Number Theory, 12(4): 913–943, 2016.
5. The set of distances in seminormal weakly Krull monoids.  
*With A. Geroldinger*, J. Pure Appl. Algebra, 220: 3713–3732, 2016.
6. Products of  $k$  atoms in Krull monoids.  
*With Y. Fan*, Monatsh. Math., 181(4): 779–795, 2016.
7. A Characterization of class groups via sets of lengths II.  
*With A. Geroldinger*, J. Théor. Nombres Bordeaux, 29(2): 327–346, 2017.
8. Systems of sets of lengths: transfer Krull monoids versus weakly Krull monoids.  
*With A. Geroldinger and W. Schmid*, in Rings, Polynomials, and Modules, Springer 2017.
9. Long sets of lengths with maximal elasticity.  
*With A. Geroldinger*, Canad. J. Math., 70: 1284–1318, 2018.
10. Sets of minimal distances and characterizations of class groups of Krull monoids.  
Ramanujan J., 45(3):719–737, 2018.
11. A characterization of finite abelian groups via sets of lengths in transfer Krull monoids,  
Comm. Algebra, 46: 4021–4041, 2018.
12. Sets of arithmetical invariants in transfer Krull monoids,  
*With A. Geroldinger*, J. Pure Appl. Algebra, to appear.
13. On elasticities of locally finitely generated monoids,  
submitted.
14. A characterization of seminormal C-monoids,  
*With A. Geroldinger*, submitted.
15. On the arithmetic of Mori monoids and domains,  
submitted.

### **Organization of Conferences since 2015**

- Combinatorial and Additive Number Theory, Graz, January 4–8, 2016 (jointly with A. Geroldinger, A. Reinhart, and D. Smertnig).
- Conference on Rings and Factorizations, Graz, February 19–23, 2018 (jointly with A. Geroldinger, J. Oh, and S. Tringali).

### **Scientific conferences and Seminars since 2015**

- *AMS Special Session: Additive Combinatorics including its interplay with factorization theory*  
Fudan University, Shanghai, China, June 11–14, 2018  
*Talk: Krull monoids and Additive Combinatorics*
- 30th Journées Arithmétiques  
University of Caen, Caen, France, July 3–7, 2017  
*Talk: The set of minimal distances and Characterization of class groups*
- Palaiseau Days on Additive Combinatorics  
École polytechnique, Paris, France, June 29–30 2017  
*Talk: The set of minimal distances and Characterization of class groups in Krull monoids*
- Algebra and Number Theory Seminar  
Uni Graz, Austria, October 27, 2016  
*Talk: Sets of minimal distances and Characterizations of class groups of Krull monoids*
- Triveni Number Theory Meet @ HRI  
HRI, Allahabad, India, March 4–8, 2016  
*Talk: Sets of lengths in Krull monoids*
- Algebra and Number Theory Seminar  
Uni Graz, Austria, October 29, 2015  
*Talk: A characterization of class groups via sets of lengths*
- Additive Combinatorics in Marseille  
CIRM, Marseille, France, September 7–11, 2015  
*Talk: The set  $\Delta^*(G)$  of minimal distances*
- 29th Journées Arithmétiques  
University of Debrecen, Debrecen, Hungary, July 5–10, 2015  
*Talk: The set of minimal distances in Krull monoids*