

## 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**

1. On the Erdos-Ginzburg-Ziv constant of finite abelian groups of high rank,  
*With Y. Fan and W. Gao,*  
J. Number Theory, 131: 1864 – 1874, 2011.
2. On short zero-sum subsequences of zero-sum sequences,  
*With Y. Fan, W. Gao, G. Wang, and J. Zhuang,*  
Electron. J. Combin., 19(3): #P31, 2012.
3. A quantitative aspect of non-unique factorizations: the Narkiewicz constants III,  
*With W. Gao and J. Peng,*  
Acta Arith., 158: 271 — 285, 2013.
4. Remarks on Tiny Zero-sum Sequences,  
*With Y. Fan, W. Gao, J. Peng, and L. Wang,*  
Integers, 13: #A52, 2013.
5. Two zero-sum invariants on finite abelian groups,  
*With Y. Fan, W. Gao, and L. Wang,*  
European J. Combin., 34(8): 1331 – 1337, 2013.
6. The catenary degree of Krull monoids II,  
*With A. Geroldinger,*  
J. Aust. Math. Soc., 98(3): 324 — 354, 2015.
7. 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.
8. The set of minimal distances in Krull monoids,  
*With A. Geroldinger,*  
Acta Arith., 173: 97 – 120, 2016.
9. 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.
10. The set of distances in seminormal weakly Krull monoids.  
*With A. Geroldinger,*  
J. Pure Appl. Algebra, 220: 3713 – 3732, 2016.

11. Products of  $k$  atoms in Krull monoids.  
*With Y. Fan,*  
Monatsh. Math., 181(4): 779 – 795, 2016.
12. A Characterization of class groups via sets of lengths II.  
*With A. Geroldinger,*  
J. Théor. Nombres Bordeaux, 29(2): 327 – 346, 2017.
13. 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.
14. Sets of minimal distances and characterizations of class groups of Krull monoids.  
Ramanujan J., 45(3): 719 – 737, 2018.
15. Long sets of lengths with maximal elasticity.  
*With A. Geroldinger,*  
Canad. J. Math., 70: 1284 – 1318, 2018.
16. A characterization of finite abelian groups via sets of lengths in transfer Krull monoids,  
Comm. Algebra, 46: 4021 – 4041, 2018.
17. Sets of arithmetical invariants in transfer Krull monoids,  
*With A. Geroldinger,*  
J. Pure Appl. Algebra, 223 (2019), 3889-3918.
18. On the arithmetic of Mori monoids and domains,  
Glasg. Math. J. , to appear.
19. A characterization of seminormal C-monoids,  
*With A. Geroldinger,*  
Boll. Unione Ital. Mat., to appear.
20. On elasticities of locally finitely generated monoids,  
J. Algebra, to appear.
21. On minimal product-one sequences of maximal length over Dihedral and Dicyclic groups.,  
*With Jun Seok Oh*  
Commun. Korean Math. Soc., to appear.

### Organization of Conferences

- 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

- Seminar for algebra and functional analysis  
University of Ljubljana, Slovenia, December 20, 2018  
*Talk: Factorization theory in Krull monoids*
- 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*