

# Min-Joo Jang

---

## Curriculum Vitae

### Personal Information

Name **Min-Joo Jang.**  
Date of Birth **Dec. 4, 1987.**  
Nationality **Republic of Korea.**

### Contact Information

Email **min-joo.jang@hku.hk.**  
Address **Department of Mathematics, The University of Hong Kong.**  
Pokfulam, Hong Kong  
Homepage **<http://www.minjoojang.com>.**

### Education

Mar. 2018 **Ph.D. in Mathematics, University of Cologne.**  
Advisor : Kathrin Bringmann  
Feb, 2015 **Master in Mathematics, Yonsei University.**  
Advisor : Jaebum Sohn  
Feb, 2012 **Bachelor in Mathematics, Yonsei University.**

### Research Interests

Number Theory and Combinatorics involving integer partitions,  $q$ -series and modular forms

### Professional Experience

Jul. 2018 **Postdoctoral-fellows, The University of Hong Kong.**  
-Current  
Winter **Co-adviser for Bachelor Thesis.**  
2017-18 Student: Stefan Thullen, Supervisor: Kathrin Bringmann.  
Summer 2017 **Co-organizer for lecture, Mathematik für Lehramtsstudierende II.**  
Lecturer: Stephan Ehlen, University of Cologne  
Winter **Co-organizer for lecture, Mathematik für Lehramtsstudierende I.**  
2016-17 Lecturer: Stephan Ehlen, University of Cologne  
2016-17 **Co-adviser for Master Thesis.**  
Student: Marcel Kraft, Supervisor: Kathrin Bringmann

2015-17 **Research Assistant**, *University of Cologne*.

2012-14 **Teaching Assistant**, *Yonsei University*.

course : Number Theory, Calculus & Vector Analysis, Advanced Calculus

## Papers and preprints

- Radial limits of the universal mock theta function  $g_3$  (with Steffen Löbrich)  
Proceedings of the American Mathematical Society, Vol. 145 (2017), 925–935.
- On spt-crank-type functions (with Byungchan Kim)  
The Ramanujan Journal, Vol. 45 Issue 1 (2018), 211–225.
- Asymptotic behavior of Odd-Even partitions  
The Electronic Journal of Combinatorics, Vol. 22 (3) (2017) #P3.62.
- Identities for overpartitions with even smallest parts (with Jeremy Lovejoy)  
International Journal of Number Theory, Vol. 14, No. 07, (2018), 2023–2033.
- Quantum modular forms and singular combinatorial series with distinct roots of unity (with Amanda Folsom, Sam Kimport, and Holly Swisher)  
Springer Research Directions in Number Theory: Women in Numbers IV, accepted for publication.
- Quantum modular forms and singular combinatorial series with repeated roots of unity (with Amanda Folsom, Sam Kimport, and Holly Swisher), submitted for publication.

## Talks

- Apr. 2018 **Quantum modular forms and singular combinatorial series.**  
AWM Research Symposium, Rice Uni. (U.S.)
- Mar. 2019 **Interesting identities involving weighted representations of integers as sums of arbitrarily many squares.**  
AMS Sectional Meeting, Uni. of Hawaii at Manoa (U.S.)
- Jan. 2019 **Product formulas and theta functions.**  
2019  $q$ -day, KIAS (South Korea)
- Jul. 2018 **Quantum modular forms and singular combinatorial series.**  
2018 HKU Number Theory Days, HKU (Hong Kong)
- Jul. 2018 **Mock theta functions and partition-theoretic functions.**  
Seminar on Pure Mathematics, HKUSK (Hong Kong)
- Jun. 2018 **Quantum modular forms and singular combinatorial series.**  
Combinatory Analysis 2018, Penn State Uni. (U.S.)
- Dec. 2017 **Quantum modular forms and singular combinatorial series.**  
Trends in Modular Forms Conference, NIMS (South Korea)
- Oct. 2017 **Identities for overpartitions with even smallest parts.**  
Partitions/Combinatorics Seminar, Penn State Uni. (U.S.)
- Mar. 2016 **On spt-crank type functions.**  
The 2016 Gainesville International Number Theory Conference, Uni. of Florida (U.S.)

- Feb. 2016 **Radial Limits of a Universal Mock Theta Function.**  
2nd q-Day, Seoul Tech (South Korea)
- Sep. 2015 **Radial Limits of a Universal Mock Theta Function.**  
Student Seminar, HKU (Hong Kong)
- Sep. 2015 **Radial Limits of a Universal Mock Theta Function.**  
Discoverers avant le PhD (DISCO), MPIM Bonn (Germany)
- Nov. 2014 **Asymptotic formula for certain distinct partitions.**  
Yonsei-Keio Workshop, Keio Uni. (Japan)