Min-Joo Jang

Curriculum Vitae

Personal Information

Name **Min-Joo Jang**.

Date of Birth **Dec. 4, 1987**.

Nationality **Republic of Korea**.

Contact Information

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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, modular forms, mock modular forms, and quantum modular forms.

Professional Experience

Jul. 2018 -Current **Postdoctoral-fellow**, *The University of Hong Kong*.

Winter 2017-18 **Co-adviser for Bachelor Thesis**.
Student: Stefan Thullen, Supervisor: Kathrin Bringmann.

Summer 2017 **Co-organizer for lecture**, *Mathematik für Lehramtsstudierende II*.
Lecturer: Stephan Ehlen, University of Cologne

Winter 2016-17 **Co-organizer for lecture**, *Mathematik für Lehramtsstudierende I*.
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

- Interesting identities involving weighted representations of integers as sums of arbitrarily many squares (with Ben Kane, Winfried Kohnen, and Siu Hang Man)
  Proceedings of the National Academy of Sciences of the United States America, Vol. 116, No. 39 (2019), 19374–19379,
- Quantum modular forms and singular combinatorial series with repeated roots of unity (with Amanda Folsom, Sam Kimport, and Holly Swisher)
  Acta Arithmetica, accepted.
- 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 (2019), 173–195
- Identities for overpartitions with even smallest parts (with Jeremy Lovejoy)
  International Journal of Number Theory, Vol. 14, No. 07, (2018), 2023–2033.
- Asymptotic behavior of Odd-Even partitions
  The Electronic Journal of Combinatorics, Vol. 24, Issue 3 (2017) #P3.62.
- On spt-crank-type functions (with Byungchan Kim)
  The Ramanujan Journal, Vol. 45 Issue 1 (2018), 211–225.
- Radial limits of the universal mock theta function g_3 (with Steffen Löbrich)
  Proceedings of the American Mathematical Society, Vol. 145 (2017), 925–935.

Talks

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 fuctions**.
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)