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RESEARCH INTERESTS	Number theory <ul style="list-style-type: none">• Iwasawa theory• Diophantine equations• Arithmetic Chern-Simons theory
EDUCATION	Pohang University of Science and Technology, Pohang, Republic of Korea B.S., Mathematics, February 2009 Ph.D., Mathematics, August 2014
EMPLOYMENT	Mar 2019 - Present Assistant Professor, Department of Mathematics, Seoul National University July 2018 - Feb 2019 Research Scientist, Department of Mathematics, Massachusetts Institute of Technology September 2016 - June 2018 Postdoctoral Assistant Professor, Department of Mathematics, University of Michigan August 2014 - August 2016 Research Fellow, Center for Geometry and Physics, Institute for Basic Science
REFEREED PUBLICATIONS	[1] D. Kim, On the Tate-Shafarevich group of elliptic curves over \mathbb{Q} , B. Korean Math. Soc. 2012 49:155-163. [2] J. Coates, D. Kim, Introduction to the work of M. Kakde on the non-commutative main conjectures for totally real fields, Noncommutative Iwasawa Main Conjectures over Totally Real Fields: Munster, April 2011, Springer Proceedings in Mathematics and Statistics, Springer, 2012. [3] D. Kim, On the p -primary part of Tate-Shafarevich group of elliptic curves over \mathbb{Q} when p is supersingular, B. Korean Math. Soc. 2013 Vol. 50, No. 2, 407-416. [4] D. Kim, p -adic L -functions over the false Tate extensions, Mathematical Proceedings of the Cambridge Philosophical Society, 2013, Volume 155 Issue 03, 483-498. [5] D. Kim, On the transfer congruence between p -adic Hecke L -functions, Cambridge Journal of Mathematics 2015, Volume 3, Number 3, 355-438. [6] D. Kim, A modular approach to cubic Thue-Mahler equations, Math. Comp. 2017, Vol 86, 1435-1471. [7] D. Kim, Descent for the punctured universal elliptic curve, and the average number of integral points on elliptic curves, Acta. Arith. 183(2018) no.3 201-222.

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- [9] D. Kim, Ramification in the cohomology of algebraic surfaces arising from ordinary double point singularities, to appear in *J. Number Theory*, [link](#).
- PAPERS IN PREPARATION
- [10] D. Kim, J. Park, J, Park, A homotopy Lie formula for the p -adic Dwork Frobenius operator, available at [arXiv:1906.06564](#) .
- [11] H. Chung, D. Kim, M. Kim, J. Park, H. Yoo, Arithmetic Chern-Simons Theory II, to be published in *p-adic Hodge Theory*, Simons Symposia, Springer-Verla, available at [arXiv:1609.03012](#).
- GRANTS
- National Research Foundation, “Non-commutative Iwasawa theory for automorphic forms” 2012H1A8A1000581, from March 2012 to August 2014.
- AMS-Simons Travel Grant, from July 2017 to Feb 2019.
- Research Resettlement Fund for the New Faculty of Seoul National University, 2019-2020
- AWARDS
- TJ Park Science Fellow, 2011-2012
- Sung-kee Chung Best Thesis Paper Award, 2014
- CITIZENSHIP
- Republic of Korea