Tokio Sasaki

University:Department of Mathematics, University of Miami
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PERSONAL INFORMATION

Year of Birth: 1987 **Gender**: Male **Nationality**: Japanese

EDUCATION

Graduate School of Art and Sciences, Washington University in St. Louis 9/2014 - 5/2019
- Majored in Mathematical Sciences. Ph.D. (Advisor: Matt Kerr)

Graduate School of Mathematical Sciences, The University of Tokyo 4/2011 - 3/2014
- Majored in Mathematical Sciences. Master's degree. (Advisor: Tomohide Terasoma)

The University of Tokyo 4/2006 - 3/2011
- Majored in Mathematics.

RESEARCH INTERESTS

Algebraic Geometry
- Hodge Theory, Algebraic Cycles, Motivic Cohomology

WORK EXPERIENCE

Research Assistant Professor (University of Miami) 7/2019 -
- Fall, 2019: Organized *Introduction to Linear Algebra*(MTH 210)
- Fall, 2020: Organized *Introduction to Linear Algebra*(MTH 210)

Teaching Assistant (Washington University in St. Louis) 9/2015 - 5/2016, 9/2017- 5/2018
- Engaged as a Teaching Assistant for *Calculus* and *Honors Mathematics* (Calculus, Linear Algebra and Set Theory).

Research Assistant (Washington University in St. Louis) 9/2016 - 5/2016

Instructor 6/2018 - 7/2018
- Engaged as a Instructor for *Matrix Algebra* during the Summer semester.

Teaching Assistant (The University of Tokyo) 4/2011 - 7/2014
- Engaged as a Teaching Assistant for Linear Algebra.

PUBLICATIONS

-"An Extension of π_1-Modules Arising From the Higher Chow Group of a Family of Surfaces in P^3" (Master's thesis)
-"Limits and Singularities of Normal Functions" (preprint, https://arxiv.org/abs/1809.05633)
-"Apéry extensions" (preprint, https://arxiv.org/abs/2009.14762)

Talks

-“Regarding the Nori-filtration and S-filtration in the Chow groups " 6th Tambara Special Manifold Workshop, the Tokyo University Tanbara International Seminar House, 9/2012

-“Explicit Hodge-D-Conjecture for Some Families of K3 Surfaces” Algebraic Geometry Seminar, Washington University in St.Louis, 11/2016

-“Hodge-D-Conjecture for Some Families of K3 Surfaces” Workshop on Algebraic Varieties, Hodge Theory and Motives, the Fields Institute for Research in Mathematical Sciences, 3/2017

-“Constructions of Calabi-Yau manifolds from Reflexive Polytopes” Algebraic Geometry Seminar, Washington University in St.Louis, 4/2017

-“Limits and Singularities for K1 cycles on Algebraic Surfaces” Workshop on Algebraic Varieties, Hodge Theory and Motives, the Fields Institute for Research in Mathematical Sciences, 3/2018

-“A Construction of Non trivial elements of Griffiths Groups on Calami-Yau threefolds” PIMS Symposium on Hodge Theory, Arithmetic and Moduli, University of British Columbia, 5/2019

-“Variation of Hodge Structures” IMSA seminar, University of Miami, 9/2019

-“Tyurin Degeneration and Periods” IMSA seminar, University of Miami, 11/2019

-“A Construction of Apéry Constants from Landau-Ginzberg Models” IMSA seminar, University of Miami, 3/2020

-“Higher Chow cycles arising from some Laurant polynomials" IMSA Workshop Recent Applications of the Theory of O-Minimal Structures to Various Questions in Hodge Theory, University of Miami (remotely), 11/2020

-“Limits of geometric higher normal functions and Apéry constants” (Canadian Mathematical Society meeting Fibrations and Degenerations in Algebraic Geometry, (remotely), 12/2020

-“(Same as above)” (Mirror symmetry and related topics 2020, Kyoto University (remotely), 12/2020