# **Curriculum Vitae**

## So Chigusa

October 23, 2019

## **Personal Data**

First Name: So

Last Name: Chigusa

Date of Birth: May 22, 1992 Place of Birth: Kobe, Japan

Nationality: Japanese

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## Education

Date	Degree	University
Mar. 24, 2017	Master of Science (Physics)	University of Tokyo
Mar. 2015	Bachelor of Science (Physics)	University of Tokyo

## Professional experience

Apr. 2015 - Mar. 2020: Ph.D. Student, Department of Physics, University of Tokyo

(Dr. Takeo Moroi)

## Teaching experience

Apr. 2015 - Sep. 2015: Teaching Assistant for Undergraduate Class "Quantum Mechanics II"

at Department of Physics, University of Tokyo

#### Grants

Apr. 2017 - Mar. 2020: JSPS, Research Fellowships for Young Scientists (DC1)

Amount: 2800000 JPY

Oct. 2015 - Mar. 2020: MEXT, Program for Leading Graduate Schools

## **Honors and Awards**

1. Best Poster Award @ HPNP 2019

#### **Publications**

- [1] S. Chigusa, T. Moroi and Y. Shoji, *Bounce Configuration from Gradient Flow*, 1906.10829.
- [2] S. Chigusa, S. Kasuya and K. Nakayama, Novel Flavon Stabilization with Trimaximal Neutrino Mixing, Phys. Rev. **D100** (2019) 015030, [1905.11517].
- [3] T. Abe, S. Chigusa, Y. Ema and T. Moroi, *Indirect studies of electroweakly interacting* particles at 100 TeV hadron colliders, Phys. Rev. **D100** (2019) 055018, [1904.11162].
- [4] S. Asai, S. Chigusa, T. Kaji, T. Moroi, M. Saito, R. Sawada et al., Studying gaugino masses in supersymmetric model at future 100 TeV pp collider, JHEP 05 (2019) 179, [1901.10389].
- [5] S. Chigusa, Y. Ema and T. Moroi, Probing electroweakly interacting massive particles with Drell- Yan process at 100 TeV hadron colliders, Phys. Lett. B789 (2019) 106–113, [1810.07349].

- [6] S. Chigusa, S. Kasuya and K. Nakayama, Flavon Stabilization in Models with Discrete Flavor Symmetry, Phys. Lett. **B788** (2019) 494–499, [1810.05791].
- [7] S. Chigusa and K. Nakayama, Anomalous Discrete Flavor Symmetry and Domain Wall Problem, Phys. Lett. **B788** (2019) 249–255, [1808.09601].
- [8] S. Chigusa, T. Moroi and Y. Shoji, Decay Rate of Electroweak Vacuum in the Standard Model and Beyond, Phys. Rev. **D97** (2018) 116012, [1803.03902].
- [9] S. Chigusa, T. Moroi and Y. Shoji, State-of-the-Art Calculation of the Decay Rate of Electroweak Vacuum in the Standard Model, Phys. Rev. Lett. 119 (2017) 211801, [1707.09301].
- [10] S. Chigusa and T. Moroi, Bottom-Tau Unification in Supersymmetric SU(5) Models with Extra Matters, PTEP 2017 (2017) 063B05, [1702.00790].
- [11] S. Chigusa and T. Moroi, Bottom-tau unification in a supersymmetric model with anomaly-mediation, Phys. Rev. **D94** (2016) 035016, [1604.02156].

#### **Invited Seminar Presentations**

- 1. "Flowing to the Bounce", Tohoku University, October 2019.
- "Indirect Studies of Electroweakly Interacting Particles at 100 TeV Hadron Colliders", Osaka University, July 2019.
- 3. "Indirect Studies of Electroweakly Interacting Particles at 100 TeV Hadron Colliders", University of Florida, May 2019.
- "Indirect Studies of Electroweakly Interacting Particles at 100 TeV Hadron Colliders", Florida State University, May 2019.
- "Indirect Studies of Electroweakly Interacting Particles at 100 TeV Hadron Colliders", KEK, April 2019.
- 6. "Solutions to Domain Wall Problem in Models with Discrete Flavor Symmetry", Hokkaido University, January 2019.
- 7. "Probing Electroweakly Interacting Massive Particles with Drell-Yan Process at 100 TeV Hadron Colliders", Nagoya University, October 2018.

#### Presentations at International Conferences

#### (Oral)

- 1. "Indirect Studies of Electroweakly Interacting Particles at 100 TeV Hadron Colliders", Summer Institute 2019, Gangneung, Korea, August 2019.
- 2. "Flowing to the Bounce", New Higgs Working Group 26, Osaka, August 2019.
- 3. "Indirect Studies of Electroweakly Interacting Particles at 100 TeV Hadron Colliders", SUSY 2019, Texas, May 2019.
- 4. "Indirect Studies of Electroweakly Interacting Particles at 100 TeV Hadron Colliders", Pheno 2019, Pittsburgh, May 2019.
- 5. "Flavon Stabilization in Models with Discrete Flavor Symmetry", KEK-PH 2018 winter, Tsukuba, December 2018.
- 6. "Decay Rate of the Electroweak Vacuum in the Standard Model and Beyond", Planck 2018, Bonn, May 2018.
- 7. "Bottom-Tau Unification in Supersymmetric Models", New Physics Forum, IPMU, February 2017.
- 8. "Bottom-Tau unification in Supersymmetric Model with Anomaly-Mediation", SUSY 2016, Melbourne, July 2016.

#### (Poster)

1. "Probing Electroweakly Interacting Massive Particles with Precision Measurements at 100 TeV Hadron Colliders", HPNP2019, Osaka, February 2019.

#### Presentations at Domestic Conferences

#### (Oral)

- 1. "Flavon Stabilization without Domain Wall Problem in Discrete Flavor Symmetry Models", Neutrino Oscillation and Flavor Physics, Nagoya, June 2019.
- 2. "Zero Mode Problem in the Calculation of Decay Rate of the SM Electroweak vacuum", JPS 2018, Shinshu, September 2018.
- 3. "Bottom-Tau unification in Supersymmetric Model with Anomaly-Mediation", JPS 2016, Miyazaki, September 2016.

#### (Poster)

- 1. "Indirect Search of WIMP Dark Matter at Future 100 TeV Collider", PPP 2018, Kyoto, August 2018.
- 2. "Bottom Tau Unification in Supersymmetric Models", PPP 2017, Kyoto, August 2017.

#### Poster Presentations at International Summer Schools

- 1. "Decay Rate of the Electroweak Vacuum in the Standard Model and Beyond", Cargese Summer School 2018, July 2018.
- 2. "Bottom Tau Unification in Supersymmetric Models", Les Houches Summer School 2017, July 2017.