

Yuji Ando

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A postdoc at National Institute of Advanced Industrial Science and Technology. My main interests are in non-perturbative string theory as quantum gravity and mathematical aspects of quantum field theory. In particular, the recent research topics I am working on are string field theory, Batalin-Vilkovisky formalism, and homotopy algebra. I have two single-authored papers and one paper written by only two with a student who is in a master's course. My high research and teaching skills are guaranteed not only by my publications but also by the fact that I have received three fellowships and two awards.

EDUCATION

Ph.D. - University of Tsukuba

Supervisor : Nobuyuki Ishibashi

Thesis title "String amplitudes around tachyon vacuum solutions in open-closed string field theory"

April 2021 - March 2024

Master's degree - Nihon University

Supervisor : Akitsugu Miwa

Thesis title "Intertwining solutions with general reference D-branes and multi-brane solutions"

April 2019 - March 2021

RESEARCH CAREERS

Postdoctoral Researcher

National Institute of Advanced Industrial Science and Technology

April 2024 - present

Research assistant

University of Tsukuba

June 2023 - November 2023

Research assistant

University of Tsukuba

June 2022 - November 2022

Research assistant

University of Tsukuba

December 2021 - February 2022

AWARD

The Dean's Award from Graduate School of Science and Technology, University of Tsukuba

March, 2024

Best Presentation Award in the 69th YONUPA Summer School

August, 2023

FELLOWSHIP

Suuri Fellowship at University of Tsukuba

April 2023 - March 2024

Suuri Fellowship at University of Tsukuba

April 2022 - March 2023

Suuri Fellowship at University of Tsukuba

April 2021 - March 2022

PUBLICATIONS

1. **Y. Ando**, “Closed string amplitudes around tachyon vacuum solution in Kaku theory”
[arXiv:2310.14308 \[hep-th\]](#).
2. **Y. Ando** and T. Suda, “Energy from Ellwood invariant for solutions involving X^0 variables”
Eur.Phys.J.C **84** (2024) 6, 578, [arXiv:2303.13789 \[hep-th\]](#).
3. **Y. Ando**, “The classical solutions with $k_- = 0$ in Kaku theory”
PTEP **2023** (2023) 063B02, [arXiv:2302.03928 \[hep-th\]](#).

INVITED TALKS

1. “Why do string field theorists passionately study homotopy algebra?”
Meeting for Intersections of Nuclear and Other Researches, Osaka University
March 8, 2024
2. “Closed string amplitudes around tachyon vacuum solution in Kaku’s bosonic string field theory”
Theoretical Particle Physics Group Seminar, Nara Women’s University
December 15, 2023
3. “Closed string amplitudes around tachyon vacuum solution in Kaku’s bosonic string field theory”
KOMABA Particle Theory Group Seminar, University of Tokyo
October 5, 2023
4. “Closed string amplitudes around tachyon vacuum solution in Kaku’s bosonic string field theory”
Particle Theory Group Seminar, Ibaraki University
July 11, 2023
5. “Recent developments of string field theory”
1st meeting in 2023, Tomonaga Center for the History of the Universe, University of Tsukuba
June 27, 2023
6. “Closed string amplitudes around tachyon vacuum solution in Kaku’s bosonic string field theory”
Particle Theory Group Colloquium, Nihon University
May 12, 2023

CONFERENCES

* symbol represents the speaker

1. “Relation between covariant and light-cone superstring field theory”
***Y. Ando**, R. Fujii, H. Kunitomo, J. Yoshinaka, KEK Theory Workshop 2023, KEK
November 29, 2023
2. “Field redefinition between Witten and Kugo-Zwiebach superstring field theory”
Y. Ando, R. Fujii, H. Kunitomo, *J. Yoshinaka, JPS 78th Annual Meeting, Tohoku University
September 18, 2023

3. **“Derivation of similarity transformation from light-cone BRST charge to RNS BRST charge”**
 Y. Ando, *R. Fujii, H. Kunitomo, J. Yoshinaka, JPS 78th Annual Meeting, Tohoku University
 September 18, 2023
4. **“Closed string amplitudes around tachyon vacuum solution in Kaku theory”**
 Y. Ando, JPS 78th Annual Meeting, Tohoku University
 September 16, 2023
5. **“Quantum Field Theory and Homotopy Algebra”**
 Y. Ando, 69th YONUPA Summer School, National Olympics Memorial Youth Center
 August 19, 2023
6. **“Derivation of similarity transformation from light-cone BRST charge to RNS BRST charge”**
 Y. Ando, *R. Fujii, H. Kunitomo, J. Yoshinaka, 69th YONUPA Summer School, National Olympics Memorial Youth Center
 August 18, 2023
7. **“Derivation of similarity transformation from light-cone BRST charge to RNS BRST charge”**
 Y. Ando, *R. Fujii, H. Kunitomo, J. Yoshinaka, Strings and Fields 2023, Kyoto University
 August 7, 2023
8. **“Field redefinition between Witten and Kugo-Zwiebach superstring field theory”**
 Y. Ando, R. Fujii, H. Kunitomo, *J. Yoshinaka, Strings and Fields 2023, Kyoto University
 August 4, 2023
9. **“Open-closed string field theory using Kaku vertex”**
 Y. Ando, Strings and Fields 2023, Kyoto University
 August 4, 2023
10. **“The relation between covariant and lightcone superstring field theories”**
 Y. Ando, R. Fujii, H. Kunitomo, *J. Yoshinaka, Integrability, Deformations and Chaos, Okinawa Institute of Science and Technology
 July 27, 2023
11. **“The open-closed string field theory using Kaku vertex”**
 Y. Ando, JPS 2023 Spring Meeting, online
 March 23, 2023
12. **“Energy and Ellwood invariant at time-dependence solutions in Witten’s bosonic open string field theory”**
 Y. Ando, *T. Suda, 68th YONUPA Summer School, online
 August 9, 2022
13. **“Bosonic open string field theory with weak A_∞ structure using Kaku vertex”**
 Y. Ando, 68th YONUPA Summer School, online
 August 9, 2022
14. **“The classical solution in Kaku model”**
 Y. Ando, JPS 77th Annual Meeting, online
 March 17, 2022

15. **“Perturbative vacuum solution using flag state”**
Y. Ando, 67th YONUPA Summer School, online
August 8, 2021
16. **“Intertwining solutions with general reference D branes”**
Y. Ando, JPS 76th Annual Meeting, online
March 13, 2021
17. **“Intertwining field and boundary condition in Witten’s bosonic open string field theory”**
***Y. Ando**, A. Miwa, 64th Nihon university CST Academic Conference, online
December 2, 2020
18. **“Intertwining solution in Witten’s bosonic string field theory(review)”**
Y. Ando, Young Particle Physicist online Conference, online
August 28, 2020

TEACH CAREERS

Part-time teacher	April 2024 - present
Japan International University	
Teaching assistant	April 2023 - March 2024
University of Tsukuba	
Teaching assistant	May 2022 - March 2023
University of Tsukuba	
Teaching assistant	October 2021 - March 2022
University of Tsukuba	

OTHERS

The coordinator of Career Forum in the 70th YONUPA Summer School
August 21, 2024

Atom research fellow at Yukawa Institute for Theoretical Physics, Kyoto University
 Supported by the Yukawa Institute for Theoretical Physics, I stayed there. During the stay, I discussed and interacted with Prof. Hiroshi Kunitomo and a variety of researchers as a member of the institute.
May 19, 2023 - June 19, 2023

The organizer of the 68th YONUPA Summer School
 I organized the summer school. I planned some lectures and conferences, and 319 persons joined there
August 6, 2022 - August 9, 2022