

# SUNAO SUGIYAMA

CV, Compiled on July 19, 2024

## CONTACT INFORMATION

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## RESEARCH INTERESTS

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**Theoretical and Observational cosmology:** *large-scale structure of the Universe, gravitational weak/micro lensing, primordial black hole*

## COLLABORATIONS

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Subaru HSC weak lensing working group, member (2021-present)  
Dark Enrgy Survey (DES), member (2024-present)

## POSITIONS

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<b>Current</b>	<b>Postdoctoral researcher,</b> University of Pennsylvania, Philadelphia, the United States Mentor: Prof. Bhuvnesh Jain <b>JSPS Overseas Research Fellow,</b> University of Pennsylvania, Philadelphia, the United States	Sep. 2023 – present    Sep. 2023 – present
<b>Past</b>	<b>Postdoctoral researcher,</b> Kavli IPMU, Chiba, Japan Mentor: Prof. Masahiro Takada <b>Project Researcher,</b> Beyond AI, Tokyo, Japan <b>JSPS Research Fellowships for Young Scientists (DC2),</b> Kavli IPMU, Chiba, Japan	Apr. 2023 – Aug. 2023    Apr. 2023 – Aug. 2023  Apr. 2021 – Mar. 2023
<b>Educations</b>	<b>University of Tokyo, Tokyo, Japan,</b> Ph.D. course in Physics Dissertation: “ <i>Joint cosmology analyses using gravitational weak lensing data from Subaru Hyper Suprime-Cam</i> ” Supervisor: Prof. Masahiro Takada <b>University of Tokyo, Tokyo, Japan,</b> M.S. in Physics Dissertation: “ <i>Validation of cosmological analysis based on perturbation theory for wide-field galaxy survey</i> ” Supervisor: Prof. Masahiro Takada <b>University of Tokyo, Tokyo, Japan,</b> B.A. in Physics	Apr. 2020 – Mar. 2023       Apr. 2018 – Mar. 2020       Apr. 2014 – Mar. 2018

## GRANT & AWARDS

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Grant-in-Aid for JSPS Research Fellows (DC2), Japan Society for the Promotion of Science, Apr. 2021 – Mar. 2023

**The School of Science Encouragement Award (Doctoral program)**, University of Tokyo, the School of Science, Mar. 2023

**WINGS IGPEES, course completion**, Sep. 2018 – Mar. 2023

## TEACHING

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Collaborative coding: git and github, **CD3 symposium** 2023, Kavli IPMU

Coadvised Noriaki Nakasawa, a master student at the University of Nagoya, 2022

## PROFESSIONAL ACTIVITIES

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<b>Society</b>	The Astronomical Society of Japan (ASJ), 2018 – present The Physical Society of Japan (JPS), 2022 – present
<b>Seminar/Workshop</b>	IPMU weekly lunch seminar (co-organizer), 2019 – 2021 HSC weaklensing mini workshop, Aug. 2022
<b>Referee</b>	International Journal of Modern Physics D The Astrophysical Journal
<b>Computing</b>	<b>fft-extended-source</b> <b>fastnc</b> <b>dark emulator</b> as a part of <b>Dark Quest Project</b> I can work with C, C++, Python, HSC pipeline (for image analysis)
<b>Accepted Observation</b>	<b>PI</b> of <b>Definitive search for PBH dark matter in the multiverse cosmology with HSC</b>

## PUBLIC ENGAGEMENT AND OUTREACH

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Apperence on *Cosmic Front, Primordial Black Hole: the master key of the Universe (title in Japanese)* produced by NHK, 2021

Interviewed by Quanta Magazine on *Clashing Cosmic Numbers Challenge Our Best Theory of the Universe*, 2024

Interviewed by Asahi Shimbun on *Breakdown in the standard model of the Universe? An analysis using precise dark matter “map” (title in Japanese)*, 2024

## LIST OF PUBLICATIONS, TALKS, AND PRESS RELEASES

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The list of publications, talks, and press releases is available [here](#).