# **Tilman Hartwig**

**Assistant Professor** 

November 30, 2021 hartwig@phys.s.u-tokyo.ac.jp

#### **EDUCATION & EMPLOYMENT**

Assistant Professor, Institute for Physics of Intelligence, UTokyo	since 2018
Associate Researcher, Kavli IPMU, UTokyo	since 2018
JSPS Postdoctoral Research Fellow, University of Tokyo	2017—2018
PhD in Astrophysics, Institut d'Astrophysique de Paris	2014—2017
Canon Research Fellow, University of Tokyo	Spring 2017
ERC Student Scholarship, University of Texas at Austin	Spring 2014
Master of Physics, University of Heidelberg	2011—2014

### FELLOWSHIPS & AWARDS

Best Poster Award at the Conference "First Stars VI"	2020
JSPS Postdoctoral Fellowship for Research in Japan	2017—2018
European Research Grant PhD Scholarship	2014—2017
Canon Foundation Research Fellowship	2017
European Research Grant Scholarship	2014
Award for teaching excellence from the University of Heidelberg	2013
Award of the German Physical Society for outstanding achievements in physics	2008
Ferri Porsche Award for extraordinary achievements in mathematics and physics	2008

#### **GRANTS**

JSPS "Early Career" Grant (~23,000USD)	2020—2022
5000€ SPIE grant for scientific outreach in Liberia	2020—2021
JSPS "Start-Up" Grant (~27,000USD)	2019—2021
3.9Mio CPU hours awarded on XC50 @ CfCA Japan	2018—2021
4 nights with Subaru-FOCAS (Co-I)	2019
500€ from the "Open Astronomy Schools" Project for scientific outreach in Liberia	2019
2000€ from the International Astronomical Union for scientific outreach in Liberia	2019
NSF Travel Support (500USD)	2019
"Grants-in-Aid for Scientific Research" Grant (Co-I, ~10,000USD)	2018—2019
IPMU "Focus Week" (~28,000USD)	2018
Shinko Zaidan conference support (Co-I, ~5,000USD)	2018

### PUBLICATION SUMMARY

22 accepted publications (12 as first author)

2 submitted publications

1 contributed book chapter

Citation report via ADS: 684 citations, h-index=16

#### SUPERVISION

- 1 Postdoc
- 6 Graduate Students
- 4 Undergraduate Students

### **TEACHING**

I have 500h of teaching experience and gave over 10 different tutorials and lectures:	
Lecture "Astrophysics"	Winter Term 2019, 2021
Seminar "Galactic Dynamics"	Summer Term 2021
Seminar "Generative Deep Learning"	Summer Term 2020
Invited Lecture "Black Holes"	compact course (1 week), 2019
Study Group "Machine Learning"	Summer Term 2019
Invited Lecture "Gravitational Waves"	compact course (2 days), 2019
Seminar "Star Formation"	Summer & Winter Term 2018/19
Teaching Assistant (TA) "Theoretical Physics 2"	Summer Term 2013
TA "Introduction to Astronomy & Astrophysics 1"	Winter Term 2012
TA "Theoretical Physics 1"	Winter Term 2012, 2013
Lecture "Mathematics for Engineers"	compact course (2 weeks), 2012
TA "Physics A" & "Physics B"	Winter/Summer Term 2011/12
Lecture "Physics for Engineers"	compact course (1 week) 2011, 2012, 2013
TA "Physics for Medical Scientists"	compact course (1 week) 2010, 2011, 2012
TA "Mathematics for Medical Scientists"	compact course (1 week) 2010, 2011, 2012

### PUBLIC OUTREACH & SERVICE

Referee for MNRAS, ApJ, JCAP, OJA	since 2016
Administrator of a computing cluster (500CPUs, 14GPUs)	since 2020
Speaker at "Open Science Cafe" on AI, Kyoto	2019
Organisation of a 1-week workshop for science teachers in Monrovia, Liberia	2012, 2019
Speaker at "Space Cafe Tokyo" on Supermassive Black Holes	2019
Speaker at "Science Cafe" Public Outreach Event in Aspen	2019
Organisation of a public outreach event for high-school students in Tokyo	2018
Organisation of a 1-day conference at the Institute d'Astrophysique de Paris	2015
Scientific Expert for the "Fête de la Science" at Sorbonne Universités	2015, 2016
Public outreach talk at a high school	2015
Organisation of workshops for science teachers in Accra, Ghana	2010

# LEADERSHIP EXPERIENCE

Organiser of the monthly "Machine Learning" seminar @ ipi	since 2019
Chair of Conference Organising Committee (90 participants)	2018
Organiser of the weekly BH/AGN seminar @ IAP	2016—2017
Student representative for over 150 students of my PhD school	2014—2016
Founder and Oversea Coordinator of the Helping Hands Network (non-profit or-	since 2012
ganisation providing eduction to less privileged communities)	

# CONFERENCES & WORKSHOPS

7 Invited Talks 23 Contributed Talks

6 Poster Presentations

# RESEARCH PRESENTATIONS

5 Invited Colloquia

31 Seminars