

EDUCATION & EMPLOYMENT

Since 2018: Assistant Professor, Institute for Physics of Intelligence, UTokyo
Since 2018: Associate Researcher, Kavli IPMU, UTokyo
2017-2018: JSPS Postdoctoral Research Fellow, University of Tokyo
2014-2017: PhD in Astrophysics, Institut d'Astrophysique de Paris, Supervisor: Dr. Marta Volonteri
Spring 2017: Canon Research Fellow, University of Tokyo
Spring 2014: ERC Student Scholarship, University of Texas at Austin
2011-2014: Master of Physics, University of Heidelberg, Supervisor: Prof. Dr. Ralf Klessen
2008-2011: Bachelor of Physics, University of Heidelberg, Supervisor: Prof. Dr. Matthias Bartelmann

FELLOWSHIPS & AWARDS

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

GRANTS

2020-2022: JSPS "Early Career" Grant (~23,000USD)
2022: 2 nights with Subaru HSC (Co-I)
2022: 1 night with FLAMINGOS-2/Gemini (Co-I)
2020-2021: 5000USD SPIE grant for scientific outreach in Liberia
2020-2021: 1.4Mio CPU hours awarded on XC50 @ CfCA Japan
2019 - 2021: JSPS Start-up Grant (27,000USD)
2021: 2.5 nights with Subaru HSC (Co-I)
2019-2020: 1.4Mio CPU hours awarded on XC50 @ CfCA Japan
2020: 6 nights with Chandra (Co-I)
2019-2020: 2 nights with GMOS(N) Gemini (Co-I)
2019: 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)
2018-2019: 1.1Mio CPU hours awarded on XC50 @ CfCA Japan
2017-2018: "Grants-in-Aid for Scientific Research" Grant (Co-I, ~10,000USD)
2018: IPMU "Focus Week" (~28,000USD)
2018: Shinko Zaidan conference support (Co-I, ~5,000USD)
2018: 100,000 CPU hours awarded on XC30 @ CfCA Japan

PUBLICATION SUMMARY

30 accepted publications (14 as first author)
7 submitted publication
1 contributed book chapter
Citation report via ADS: 753 citations, h-index=17

SUPERVISION

Since 2022: Betül Uysal, Graduate Student, University of Orelans
Since 2021: Jiang Hanchun, Undergraduate Student, University of Nanjing
Since 2020: Chris Nagele, Graduate Student, University of Tokyo
Since 2020: Naren Raju, Graduate Student, University of Tokyo
Since 2020: Li-Hsin, Chen, Graduate Student, University of Heidelberg
2020-2021: Mohammad Mardini, Postdoc, China
2020-2021: Naoto Kuriyama, Graduate Student, University of Tokyo
2019-2020: Liu Ziyin, Graduate Student, University of Heidelberg
2019-2020: Tatsuya Daniel, Undergraduate Student, University of Tokyo
2018-2020: Yuta Tarumi, Graduate Student, University of Tokyo
2017: Nikita Gupta, Undergraduate Student, Institute d'Astrophysique de Paris
2015-2016: Mattis Magg, Undergraduate Student, University of Heidelberg

TEACHING

I have 500h of teaching experience and gave over 10 different tutorials and lectures:
Summer Term 2022: Study Group „GPU Programming“
Summer Term 2022: Seminar „Stellar Physics“
Winter Term 2019 & 2021: Lecture on “Astrophysics & AI”
Summer Term 2021: Seminar “Galactic Dynamics”
Summer Term 2020: Seminar “Generative Deep Learning”
Compact course (1 week), 2019: Invited Lecture on “Black Holes”
Summer Term 2019: Study Group “Machine Learning”
Compact course (2 days), 2019: Invited Lecture on “Gravitational Waves”
Summer & Winter Term 2018/19: Lecturer “Star Formation”
Summer Term 2013: Teaching Assistant (TA) “Theoretical Physics 2”
Winter Term 2012: TA “Introduction to Astronomy & Astrophysics 1”
Winter Term 2012 & 2013: TA “Theoretical Physics 1”
compact course (2 weeks), 2012: Lecturer “Mathematics for Engineers”
Summer Term 2012: TA “Physics B”
Winter Term 2011: TA “Physics A”
1 week compact course 2011, 2012, 2013: Lecturer “Physics for Engineers”
1 week compact course 2010, 2011, 2012: TA “Physics for Medical Scientists”
1 week compact course 2010, 2011, 2012: TA “Mathematics for Medical Scientists”

PUBLIC OUTREACH & SERVICE

since 2020: Member of the Japanese Astronomical Society
since 2020: Administrator of an AI computing cluster (500CPUs, 14GPUs)
since 2016: Referee for MNRAS, ApJ, JCAP, OJA
2012, 2019: Organisation of a 1-week workshop for science teachers in Monrovia, Liberia
2019: Speaker at “Open Science Meetup” in Kyoto
2019: Speaker at “Space Cafe Tokyo” on Supermassive Black Holes
2019: Organisation of a public lecture on Artificial Intelligence at UTokyo
2019: Welcoming address for JSPS Postdoctoral Fellows x 2
2019: Speaker at Science Cafe Aspen
2018: Organisation of a public outreach event for high-school students in Tokyo
2015: Organisation of a 1-day conference at the Institute d'Astrophysique de Paris
2015, 2016: Scientific Expert for the “Fête de la Science” at Sorbonne Universités
2015: Public outreach talk at a high school
2010: Organisation of workshops for science teachers in Accra, Ghana

LEADERSHIP EXPERIENCE

since 2019: Organiser of the monthly AI seminar (Institute for Physics of Intelligence)
2018: Chair of Conference Organising Committee (90 participants)
2016-2017: Organiser of the weekly BH/AGN seminar (Institute d'Astrophysique de Paris)
2014-2016: Student representative for over 150 students of my PhD school
since 2012: Founder and Oversea Coordinator of the Helping Hands Network, a non-profit organisation providing education to less privileged communities

CONFERENCES & WORKSHOPS

2020: Invited Review Talk, Conference "SAZERAC"
2020: Invited Review Talk, Conference "First Stars VI"
2019: Invited Review Talk, Workshop "First Stars & Galaxies"
2017: Invited Review Talk, Workshop "Titans of the Early Universe"
2018: Invited Talk, Workshop "Taiwanese Theoretical Astrophysics Workshop"
2016: Invited Talk, Workshop "Young Astronomers on Galactic Nuclei"
2015: Invited Talk, Workshop "From Île-de-France to the Edge of the Universe"
2022: Contributed Talk, Workshop "First Stars & Galaxies"
2021: Contributed Talk, „The metal-poor Universe 2021“
2021: Contributed Talk, „Nucleii in the Cosmos“
2021: Contributed Talk, „ASJ Fall Meeting“
2021: Contributed Talk, „RESCEU Summer School“
2021: Contributed Talk, Workshop "GALAH Science Meeting"
2020: Contributed Talk, Workshop "First Stars & Galaxies"
2020: Contributed Talk, "ASJ Fall Meeting"
2020: Contributed Talk, "RESCEU Summer School"
2019: Contributed Talk, "NAOJ / JINA-CCE" Workshop
2019: Contributed Talk, "Astronomy as Gateway to Scientific Literacy in Liberia" Symposium
2019: Contributed Talk, "CEMP Stars as Probes..." Conference
2019: Contributed Talk, "EWASS" Conference
2019: Contributed Talk, Conference "Extremely Big Eyes..."
2019: Contributed Talk, Conference "Into the Starlight"
2018: Contributed Talk, Conference "Stellar Archaeology as a Time Machine..."
2018: Contributed Talk, Workshop "First Stars"
2017: Contributed Talk, Workshop "Celebration of CEMP & Gala of GALAH"
2016: Contributed Talk, Summer School "Astrophysical Jets"
2015/16/17: Contributed Talk, Conference "Elbereth"
2015: Contributed Talk, "EWASS" Conference
2015: Contributed Talk, Conference "First stars, galaxies, and black holes"
2022: Poster Presentation, PFS Collaboration Meeting
2019: Poster Presentation, "EWASS" conference
2018: Poster Presentation, "Astronomy Teaching Summit"
2016: Poster Presentation, Conference "First Stars V"
2015: Poster Presentation, Conference "Cosmology and First Light"
2014: Poster Presentation, Conference "First star and galaxy formation"
2013: Poster Presentation, Conference "Mind the Gap"
2020: Participation, Workshop "Astrophysics of LIGO/Virgo sources in O3 era"
2018: Participation, Conference "Communicating Astronomy to the Public"
2013: Participation, Conference "Protostars & Planets VI"

RESEARCH PRESENTATIONS

2022: Seminar, IReNA Community
2021: Seminar, University of Hertfordshire
2020: Seminar, University of Tokyo
2020: Seminar, University of Tokyo
2020: Seminar, UCSC
2020: Seminar, Tohoku University
2020: Seminar, University of Tokyo, Hongo Campus
2019: Seminar, University of Tokyo, Komaba Campus
2019: Seminar, Tokyo University of Agriculture and Technology
2019: Seminar, Konan University
2019: Invited Colloquium, University of Liberia
2019: Seminar, University of Tokyo
2019: Seminar, NAOJ
2019: Seminar, Yamamoto Group
2019: Invited Colloquium, AIP Potsdam
2019: Seminar, Brazilian Center for Research in Physics
2019: Seminar, University of Concepcion
2019: Seminar, Stanford University
2018: Invited Colloquium, University of Liberia
2018: Seminar, University of Notre Dame
2018: Seminar, Georgia Tech
2018: Seminar, Dublin City University
2018: Seminar, University of Tokyo
2018: Seminar, National Taiwan University
2017: Invited Colloquium, ICG Portsmouth
2017: Invited Colloquium, University of Kyoto
2017: Seminar, Tohoku University
2017: Seminar, Konan University
2017: Seminar, University of Tokyo
2016: Group Meeting, Harvard-Smithsonian CfA
2016: Seminar, MIT
2016: Seminar, Institute d'Astrophysique de Paris
2015: Seminar, Institute d'Astrophysique de Paris
2014: Seminar, University of Texas in Austin
2014: Seminar, Institute d'Astrophysique de Paris
2013: Group Meeting, University of Heidelberg
2013: Seminar, University of Göttingen
2013: Group Meeting, University of Heidelberg