

CURRICULUM VITAE OF ZIANG YAN

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EMPLOYMENT

Ruhr-University Bochum German Centre for Cosmological Lensing Fellow	2021.11-present
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EDUCATION

University of British Columbia, Vancouver PhD in Physics Supervisor: Profs. Gary Hinshaw and Ludovic van Waerbeke Thesis: <i>Probing the Universe with Multiple Large-Scale Structure Tracers</i>	2017.09-2021.08
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University of British Columbia, Vancouver MSc in Astronomy Supervisor: Prof. Gary Hinshaw	2015.07-2017.08
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Tsinghua University, Beijing BSc in Physics Supervisor: Prof. Charling Tao	2011.09-2015.07
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HONORS AND AWARDS

2020 President's Academic Excellence Initiative PhD Award (UBC)
2018-2022 UBC Four Year Doctoral Fellowship (UBC)
2016 Physics and Astronomy Graduate Scholarship (UBC)
2015 Faculty of Science Graduate Award (UBC)
2014 The outstanding academic scholarship of Guanghua (Tsinghua)
2013-2015 Tsinghua Xuetao scholarship (Tsinghua)
2013-2015 Member Student of Tsinghua Xuetao Physics Program (Tsinghua)
2012 The outstanding academic scholarship of Zheng Geru (Tsinghua)

COMPUTER SKILLS

Languages	Python, Shell script, L ^A T _E X, C, IDL
Software	Tools for cosmological modelling, measurements, and analysis; Tensorflow

SERVICE

- Reviewer: Publications of the Astronomical Society of Japan, Nature Astronomy, Monthly Notices of the Royal Astronomical Society;

- Organizer of the journal club at GCCL

INTERNATIONAL PROJECT INVOLVEMENT

Dark Energy Science Collaboration In-kind contributor developing redshift calibration pipeline “RAIL”	2021-Present
Ultraviolet Near-Infrared Optical Northern Survey Systematics analysis with 2 point functions	2021-Present
Chinese Space Station Telescope Systematics mitigation	2020-Present
Kilo-Degree Survey Cosmological analysis with 3×2 pt and 6×2 pt; cross-correlations	2019-Present
Cosmology Large Angular Scale Surveyor Noise analysis	2017-2021
Primordial Inflation Explorer Analyzing noise propagation in the instrument	2016-2017

ACADEMIC TALKS

- Parallel session talk, DESC collaboration meeting at ETH, 2024
- Seminar talk, Kavli IPMU, 2024
- Invited talk, Institute for Theoretical Physics, Utrecht University, 2024
- Conference talk, Starting the golden years: going strong after KiDS, Leiden, 2024
- Invited talk, Department of Astronomy, Tsinghua University, online, 2023
- Parallel session talk, DESC collaboration meeting at SLAC, 2023
- Short talk and poster, YITP workshop, 2023
- Invited talk, Yunnan University, online, 2023
- Talk, CSST seminar, online, 2022
- Colloquium talk, AIRUB, Bochum, 2022
- Talk, KiDS busy week, Hull, UK, 2022
- Talk, Cosmology from home workshop, online, 2022
- Seminar talk, University of British Columbia, 2022
- Talk, KiDS busy week, Leiden, the Netherlands, 2021
- Invited talk, Department of Astronomy, Tsinghua University, 2021
- Invited talk, Shanghai Astronomical Observatory, 2021
- Seminar talk, German Centre for Cosmological Lensing, online, 2020
- Seminar talk, Kavli IPMU, online, 2020
- Seminar talk, CSST seminar, online, 2020
- Talk, KiDS busy week, online, 2020
- Group seminar talk, University of Waterloo, online, 2020

- Group seminar talk, Ohio State University, online, 2020
- Group seminar talk, Stanford University and Ludwig Maximilian University of Munich (adjoint meeting), online, 2020
- Invited seminar talk, Tsung-Dao Lee Institute, online, 2020
- Astronomy colloquium talk, University of British Columbia, 2020
- Talk, UBC-SFU-TRIUMF adjoint meeting, TRIUMF, 2020
- Talk, UBC-SFU-TRIUMF adjoint meeting, SFU, 2019
- Invited talk, Institut d'Astrophysique Spatiale, 2019
- Talk, UBC-SFU-TRIUMF adjoint meeting, SFU, 2017

VISITS, WORKSHOPS AND MEETINGS

- DESC collaboration meeting, ETH, Zürich, Switzerland, 2024.07
- Visiting scholar, Kavli IPMU, Kashiwa, Japan, 2024.06
- Visiting scholar, ITP, Utrecht, the Netherlands, 2024.05
- DESC collaboration meeting, SLAC, CA, USA, 2023.07
- KiDS busy weeks Institutes in Bochum, Leiden, Warsaw, Hull, and London, 2021-2023
- Future Science with CMB x LSS workshop YITP, Kyoto, Japan, 2023.04
- Tensions in cosmology conference Corfu, Greece, 2023.04
- Visiting scholar Department of Astronomy, THU, Beijing, China, 2021.09
- Visiting scholar Shanghai Astronomical Observatory, Shanghai, China, 2021.08
- CosmoGold IAP 2019 Workshop IAP, Paris, France, 2019.06
- Visiting scholar Institut d'Astrophysique Spatiale, Orsay, France, 2019.06
- SSI SLAC Summer Institute 2017 Workshop SLAC, CA, USA, 2017.08
- Summer Research APC, Paris, France, 2014.07
- Frontier Conference in Cosmology Beijing, China, 2014.06

TEACHING AND MENTORING EXPERIENCE

Teaching Assistant at UBC

Featured courses: Cosmology, Measurements in Physics, Group theory, High energy astrophysics, Introductory physics

Mentorship

- Angela Zhou (a high-school student): *An investigation of a dark matter-dark energy interaction model to explain discrepancies in Hubble rate measurements.*(2019-2021);
- Susrestha Paul (Bachelor's project) : *Constraining dark energy equation of state from KiDS data(2024-);*
- Leon Gawlytta (Master's project) : *A study on Lyman-break galaxy from KiDS data(2023-);*
- Fabian Kampshoff (Master's project) : *Cross-correlating KiDS-Legacy data with CMB data (2024-);*

- Shiyang Zhang (PhD project) : *Cross-correlation between KiDS and Gamma-ray; identification of dwarf galaxies from KiDS data(2023-)*

OUTREACH

Public talks

- The Century of the Universe (Public talk in high schools, 2021)
- High energy physics vs cosmology (Online interview show, 2021, [link](#))
- You first Cosmology class (Online interview show, 2021, [link](#))
- Kick Start the Universe (Three Minute Thesis Competition, UBC, 2017)
- Introduction to Astronomy (Xinhuang No.1 Middle School, Hunan, China, 2015)

Book Translation (To Chinese)

- *Gravity: A Very Short Introduction* by Timothy Clifton; ISBN: 9787544392730
- *El sistema solar (The Solar System)* by Joel Gabas Masip; ISBN: 12829555

Other activities

- News & Views article *Weighing galaxy clusters by laptop* for *Nature Astronomy*,
- Writing popular science articles about science, physics and astronomy on social media
- Outreach activity with the Astronomy Club of High School Affiliated to Minzu University
- Volunteer in stargazing activities organized by the Astronomy Club of Tsinghua University

LANGUAGE SKILLS

Mandarin (first language), English (fluent), Japanese (intermediate), German (intermediate), Cantonese (moderate)