

# Ruizhi Zhan

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## Education



Ph.D. in Atmospheric Sciences  
Department of Atmospheric and Oceanic Sciences, School of Physics, Peking University

September 2022 - June 2027, *expected*  
Beijing, China

- Advisor: Prof. Daniel D.B. Koll



B.S. in Physics  
School of Physics and Technology, Wuhan University

September 2018 - June 2022  
Wuhan, Hubei province, China

- Cumulative GPA: 3.87/4.00, rank 2/27

## Publications

**Ruizhi Zhan** and Daniel D.B. Koll. Reinterpreting the JWST Observations of 55 Cancri e with a Non-grey General Circulation Model, *under review*

**Ruizhi Zhan**, Daniel D.B. Koll and Feng Ding. Novel Atmospheric Dynamics shape Inner Edge of Habitable Zone around White Dwarfs, *The Astrophysical Journal*, 971, 125, <https://iopscience.iop.org/article/10.3847/1538-4357/ad54c1>

## Selected Awards

Cushman & Wakefield Scholarship  
30 students per year

October 2024  
Peking University

Outstanding Undergraduate Graduate  
top 10%

June 2022  
Wuhan University

National Scholarship  
top 1%

November 2021  
Wuhan University

First-class Scholarship of Wuhan University  
top 5%

October 2021  
Wuhan University

## Talks & Presentations

Zhan R, D.D.B. Koll. Reinterpreting the JWST Observations of 55 Cancri e with a Non-Grey General Circulation Model.

**Rocky Worlds 4 conference**

Oral presentation

Groningen, Netherlands, 21 January 2026

Zhan R, D.D.B. Koll. Modeling the Atmosphere of 55 Cancri e with a Non-grey General Circulation Model.

**EGU 2025 conference**

Oral presentation

Vienna, Austria, 1 May 2025

Zhan R, D.D.B. Koll. Non-Grey Global Climate Model Reveals Atmospheric Heat Redistribution on Hot Rocky Exoplanets.

**AGU 2024 conference**

Oral presentation

Washington D.C., U.S., 10 Dec, 2024

Zhan R, D.D.B. Koll. Modeling the Atmosphere of 55 Cancri e with a Non-grey General Circulation Model.

**PhD Student Forum: Frontiers in Modern Astronomy**

Oral presentation

Beijing, China, 8 Dec, 2024

Zhan R, D.D.B. Koll and F. Ding. Novel Atmospheric Dynamics shape Inner Edge of Habitable Zone around White Dwarfs.

**2024 China Planetary Science Conference**

Oral presentation

Nanjing, China, 10 Oct, 2024

Zhan R, D.D.B. Koll and F. Ding. Novel Atmospheric Dynamics shape Inner Edge of Habitable Zone around White Dwarfs.

**Exoplanets & Planet Formation Workshop 2023**

Poster presentation

Beijing, China, 16 Dec, 2023

Zhan R, D.D.B. Koll. Novel Atmospheric Dynamics shape Inner Edge of Habitable Zone around White Dwarfs.

**Exoclimates VI conference**

Poster presentation

Exeter, U.K., 29 Jun 2023

Zhan R, D.D.B. Koll. The Habitable Zone Inner Edge Around White Dwarfs.

**AGU 2022 conference**

Poster presentation

online, 16 Dec 2022

## Teaching

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Teaching Assistant, Fundamental Planetary Science

*Peking University*  
Fall 2023

Teaching Assistant, Fluid Dynamics

*Peking University*  
Spring 2024

## Competitive Observation Programs

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(Co-I) *A Search for Life Around Two Dead Stars.*

James Webb Space Telescope (JWST) Cycle 4 Guest Observers Program 7564

Principal Investigator: Dr. Limbach, Mary Anne

## Skills

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**Programming** Python (Extensively) | LaTeX (Extensively) | shell | C++ | Fortran | Typst

**Languages** Mandarin Chinese (native) | English (Proficient)

**Climate models** ExoCAM | ExoRT | Exo-k | Isca | SOCRATES

**Tools** NASA-PSG

## Service

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Distinguished Lectures on Planetary Sciences “Atmospheric Dynamics of Giant Planets, Terrestrial Planets, and Earth”

Local Organising Committee (LOC) Member

*Peking University*  
Aug 2023

Atmospheres, Climates, and Habitability of Mars and Other Planets

Local Organising Committee (LOC) Member

*Peking University*  
Aug 2024

Atmosphere, Ocean, and Climate Dynamics of Earth and Other Planets

Local Organising Committee (LOC) Member

*Peking University*  
Aug 2025