

# 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, *in prep.*

**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. Modeling the Atmosphere of 55 Cancri e with a Non-grey General Circulation Model.

Oral presentation

EGU 2025 conference

Vienna, Austria, 1 May 2025

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

Oral presentation

AGU 2024 conference

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.

Oral presentation

PhD Student Forum: Frontiers in Modern Astronomy

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.

Oral presentation

2024 China Planetary Science Conference

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.

Oral presentation

Invited Talk, Wuhan University

Wuhan, China, 31 Mar 2024

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

Poster presentation

Exoplanets & Planet Formation Workshop 2023

Beijing, China, 16 Dec, 2023

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

Poster presentation

Exoclimates VI conference

Exeter, U.K., 29 Jun 2023

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

Poster presentation

AGU 2022 conference

online, 16 Dec 2022

Teaching

Teaching Assistant, Fundamental Planetary Science

Peking University  
Fall 2023

Teaching Assistant, Fluid Dynamics

Peking University  
Spring 2024

Competitive Observation Programs

(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

Programming

Languages

Climate models

Tools

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

Mandarin Chinese (native) | English (Proficient)

ExoCAM | ExoRT | Exo-k | Isca | SOCRATES

NASA-PSG

Service

Distinguished Lectures on Planetary Sciences “Atmospheric Dynamics of Giant Planets, Terrestrial Planets, and Earth”  
Local Organising Committee (LOC) Member

Atmospheres, Climates, and Habitability of Mars and Other Planets  
Local Organising Committee (LOC) Member

Peking University  
Aug 2023

Peking University  
Aug 2024