Shalini Kurinchi-Vendhan

computational astrophysics • galaxy evolution • supermassive black holes



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Education

Ruprecht-Karls University of Heidelberg MASTER OF SCIENCE IN PHYSICS

October 2024 – July 2025 • Heidelberg, Germany

Advisor: Dr. Annalisa Pillepich

California Institute of Technology BACHELOR OF SCIENCE IN ASTROPHYSICS

September 2019 – June 2023 • Pasadena, California

Advisor: Professor Philip F. Hopkins

Earned a minor degree in English Language & Literature.

Research Experience

Max Planck Institute for Astronomy U.S. FULBRIGHT SCHOLARSHIP AWARD

September 2023 – July 2024 • Heidelberg, Germany

Advisor: Dr. Annalisa Pillepich

Supermassive Black Hole Feedback in Ram-Pressure Stripped

Jellyfish Galaxies in IllustrisTNG.

Harvard & Smithsonian Center for Astrophysics

June 2022 – August 2022 • Cambridge, Massachusetts

Advisor: Dr. Laura Brenneman & Dr. Francesca Civano

The Coevolution of Supermassive Black Holes and Galaxies with

the *Chandra* X-Ray Telescope.

École Polytechnique Fédérale de Lausanne

September 2022 – June 2023 • Lausanne, Switzerland

Advisor: Dr. Michaela Hirschmann

On the Origin of Star Formation Quenching in Early, Massive

Galaxies with IllustrisTNG.

Carnegie Observatories – Theoretical Astrophysics Center

June 2021 – August 2021 • Pasadena, California

Advisor: Dr. Andrew Benson

The Spherical Collapse of Dark Matter Halos with 3-D Numerical

Simulations and the Semi-Analytic Code Galacticus

Dark Cosmology Center – Niels Bohr Institute

June 2020 – August 2020 • Pasadena, California

Advisor: Dr. Michaela Hirschmann

The Role of AGN in Star Formation Quenching in Nearby Dwarf Galaxies in IllustrisTNG with Synthetic Emission Line Models

Publications & Talks

NASA/Harvard ADS

Fellowships & Awards

- U.S. Fulbright Scholarship
- NSF Graduate Fellowship
- Margie Lauritsen Leighton Prize in Physics
- AAS Chambliss Prize
- Perpall Speaking Award

Science Communication

space-themed children's library storytime

storytelling for scientists

astronomy travel diaries for classrooms

educational article about jellyfish galaxies

astropoetry blog

Like art, cosmological simulations tell a story by allowing us to visualize how the Universe came to be.